

FLIGHT

The
**AIRCRAFT
ENGINEER
&
AIRSHIPS**

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"FLIGHT" PHOTOGRAPHS

To those desirous of obtaining copies of "Flight" photographs, these can be supplied, enlarged or otherwise, upon application to Photo. Department, 36, Great Queen Street, W.C.2.

DIARY OF CURRENT AND FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in this list—

1928

- Oct. 4.... Lecture, "Technical Development of the Aero-plane," by J. D. North, before R.Ae.S.
- Oct. 7-28 International Aircraft Exhibition, Berlin
- Oct. 8 Aero Golfing Soc.—Team Match v. Stage G.C.
- Oct. 18 Lecture, "Light Alloys and Their Use in Aircraft," by H. Sutton, before R.Ae.S.
- Oct. 24.... Aero Golfing Soc.—"Cellon" Challenge Cup
- Nov. 1 Lecture, "Testing of Adhesives for Timber," by W. D. Douglas, before R.Ae.S.
- Nov. 8.... Lecture, "Machinery Installation of R.101," by Wing-Com. T. R. Cave-Browne-Cave, before R.Ae.S.
- Nov. 15.... Lecture, "Aeroplane Engines in Flight," by R. J. Penn, before R.Ae.S.

EDITORIAL COMMENT



FROM all that can be gathered, the International Aero Exhibition (I.L.A.) which opens in Berlin on Sunday next, October 7, will be one of the largest and probably actually the largest ever held in Europe. If reports are to be trusted, we may expect to see no less than 150 aircraft or so in the three great halls which house the exhibition. In addition to Germany, which may be expected to make a very impressive show, very large floor space is reported to have been taken by France, Italy and Czechoslovakia, to mention but three of the more important nations exhibiting. Great Britain will, as may be gathered from the brief list of exhibitors and exhibits published elsewhere in this issue, have a very representative, although somewhat small, section in the Show. The reasons for the relatively small participation by the British aircraft industry are various, and lest it be thought that British aircraft constructors are not fully alive to the importance of the Berlin Show, it may be useful to outline the position.

Fundamentally, the Berlin Show is intended as an exhibition of commercial aviation and all that pertains to it. Germany is not permitted to maintain an air force, and it is thus but natural that when an international exhibition is held in Berlin, it should be of a predominately commercial character. Moreover, with no necessity for spending money on an air force, and also, of course, as a result of her very favourable geographical position, Germany has been able, and has made the most of her opportunity, to develop a network of air lines inside her own borders which has enabled her to build up quite a large industry devoted to commercial aviation.

In Great Britain, as a result of our geographical position in a corner of Europe, we have not been able to establish more than one or two regular air routes, and consequently the demand for commercial aircraft, using the expression to indicate aircraft carrying passengers for hire over regular air routes, has been relatively very small. Out of the total number of 20 or so British aircraft firms, not more than one or two have seriously set out to

cater for this demand; the rest of the industry has not hitherto considered it worth while to dislocate their production work on service types of aircraft in order to produce commercial types, the need and demand for which was rather problematic. It is not our intention here to discuss the wisdom or otherwise of this policy, nor to attempt to forecast whether the same attitude is likely to be maintained in the future. Suffice it to point out that such is the position at the present moment. The inevitable result has been that when Germany's representative called on the British aircraft firms, he was met with an explanation, very much like that given above, as to why it was impossible for the majority of firms to exhibit at Berlin.

Another reason for the comparatively small response has been that, through the refusal of the Treasury to grant a relatively small sum towards expenses, the Society of British Aircraft Constructors has been unable to follow the most desirable course of taking concerted action in the matter, and has been, reluctantly we are sure, compelled to leave it to individual firms to uphold British prestige at the Berlin Show. That, under the circumstances, the British Section is as large and representative as is the case speaks well for the initiative of such of our firms as do produce commercial and civil types of aircraft, and forms an effective reply to the allegation, not infrequently made, that the British aircraft industry has been "spoon-fed" so long that it has lost the energy to go out and look for orders abroad.

In the case of the makers of the one type of aircraft which England has developed to a higher state of perfection than any other country in the world, the light aeroplane, we have cause to be satisfied with the British response. Three out of the four firms which have seriously tackled the production of light 'planes are exhibiting at Berlin. The fourth firm has been unable to get a light 'plane prepared in time.

A British Aero Show Next Year

ALTHOUGH the final details have not yet been settled, it has been decided to hold an aircraft exhibition in this country next year. This will be the Seventh International Aero Exhibition, organised jointly by the Society of British Aircraft Constructors, Ltd., and the Society of Motor Manufacturers and Traders. It will be held in July—probably at Olympia, from July 16 to 27.

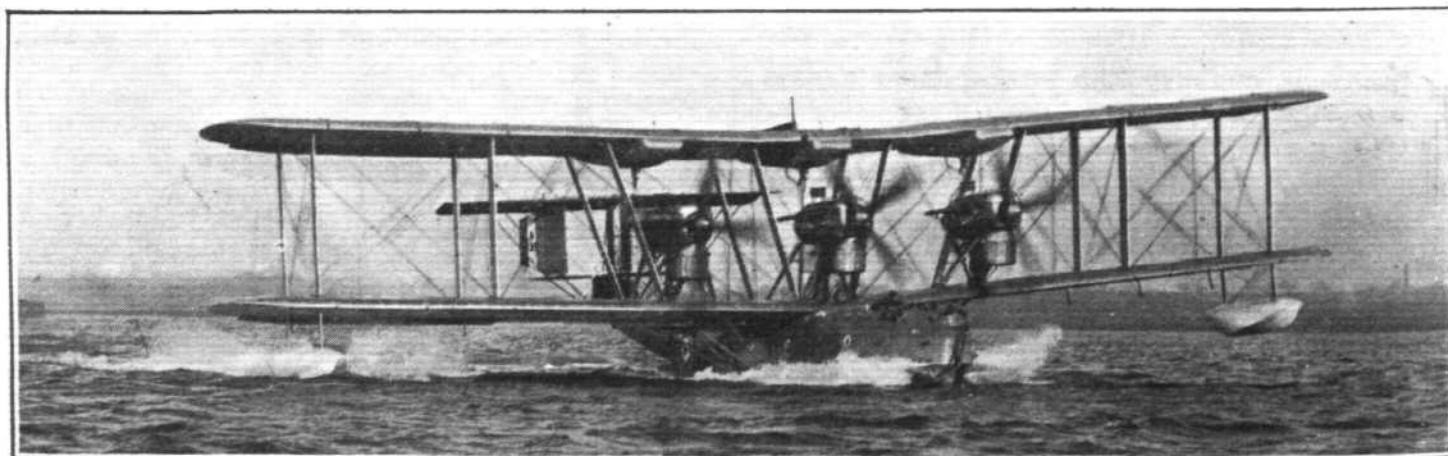
The limitations which have reduced the size of our commercial and civil aircraft exhibits do not apply so much to engines, and it is extremely gratifying to find that all our most important aero engine firms have taken stand space at the Berlin Show, so that British aero engines, occupying as they do a very high position in the world's estimation, will be thoroughly well represented. That this fact will do much to uphold British prestige cannot be doubted for a moment.

The point which we would ask readers, particularly our numerous foreign readers, to bear in mind is that the British Section at the I.L.A. represents private enterprise and initiative. The majority of foreign nations have given financial and other support to their aircraft industries. Consequently it is very much a case of British private as against foreign national effort. By bearing this fact in mind, one is able to form a truer picture of the relative merits of the various exhibits, and to avoid being unduly impressed by mere size of show and area of floor space.

One thing we do regret extremely in connection with the Berlin Show, and that is the absence of a representative British flying-boat. The Short "Calcutta" would have served admirably to represent this particular branch of British aircraft design and construction, but the first of these machines cannot, presumably, be spared, while the remaining machines of the same type are not sufficiently far advanced to be exhibited. Great Britain has made enormous strides in the development of this type of aircraft, and we do feel that a machine of the modern British flying-boat type should have been included in the British Section. It might have been possible for us to spare one of the several service types recently produced, but the military nature of this would not have been in keeping with the commercial character of the German exhibition. The fact is to be regretted, but was, we are afraid, unavoidable.

Fire Alarm from the Air

THE pilot of an aeroplane engaged in R.A.F. manoeuvres near St. Andrew's, Fife, gave the alarm when fire broke out at Rhynd Farm, a short distance from the R.A.F. base. His attention was drawn to smoke issuing from a threshing mill. He returned to the base and summoned the R.A.F. brigade, which was able to render valuable assistance before the arrival of the St. Andrew's brigade.



SIR PHILIP SASSOON'S AIR TOUR: The Blackburn "Iris" flying-boat, fitted with three Rolls-Royce "Condor" engines, in which the Under-Secretary of State for Air, Sir Philip Sassoon, is carrying out a tour of the R.A.F. Stations at Malta, the Middle East, Iraq, and India.

THE GLOSTER "GOLDFINCH"

Bristol "Jupiter" Mark VII Engine

THE latest type of Gloster military aeroplane, of which particulars may be published, is the "Goldfinch," a single-seater fighter fitted with the Bristol "Jupiter" Mark VII engine. Put very briefly, it may be said that the "Goldfinch" is the all-metal version of the well-known Gloster "Gamecock," of which large numbers are in use by the British Royal Air Force. There are differences other than

Constructional Features

Of the aerodynamic design of the "Goldfinch" little need be said here. The machine differs hardly at all from the "Gamecock" in this respect, but the results of the Gloster company's experience in the design of racing aircraft are traceable in several details. The machine is of the normal single-bay biplane type, employing, as have done Gloster

The Gloster
"Goldfinch":
Side View.
Note the neat
cowling of the
Bristol "Jupi-
ter VII" En-
gine.

["FLIGHT"
"Photograph"]



those of construction, but the "family likeness" is unmistakable. Fitted with the Bristol "Jupiter VII," which is a direct-drive supercharged engine specially designed to give maximum power at a considerable altitude, the "Goldfinch" develops its maximum horizontal speed (172 m.p.h. = 277 km./h.) at a height of about 10,000 ft. (3,050 m.), but still maintains a very excellent speed at greater heights, so that even at 20,000 ft. (6,100 m.) the speed is as high as 157 m.p.h.

machines for a number of years, a high-lift aerofoil in the upper wing and a thin section aerofoil in the lower. It is, however, in the constructional design that the greatest interest of the "Goldfinch" lies, since all-metal construction is now demanded by the British Air Ministry, and this is the first machine incorporating this feature to be produced by the Gloster Aircraft Company.

Steel is the material chiefly used in the construction of the

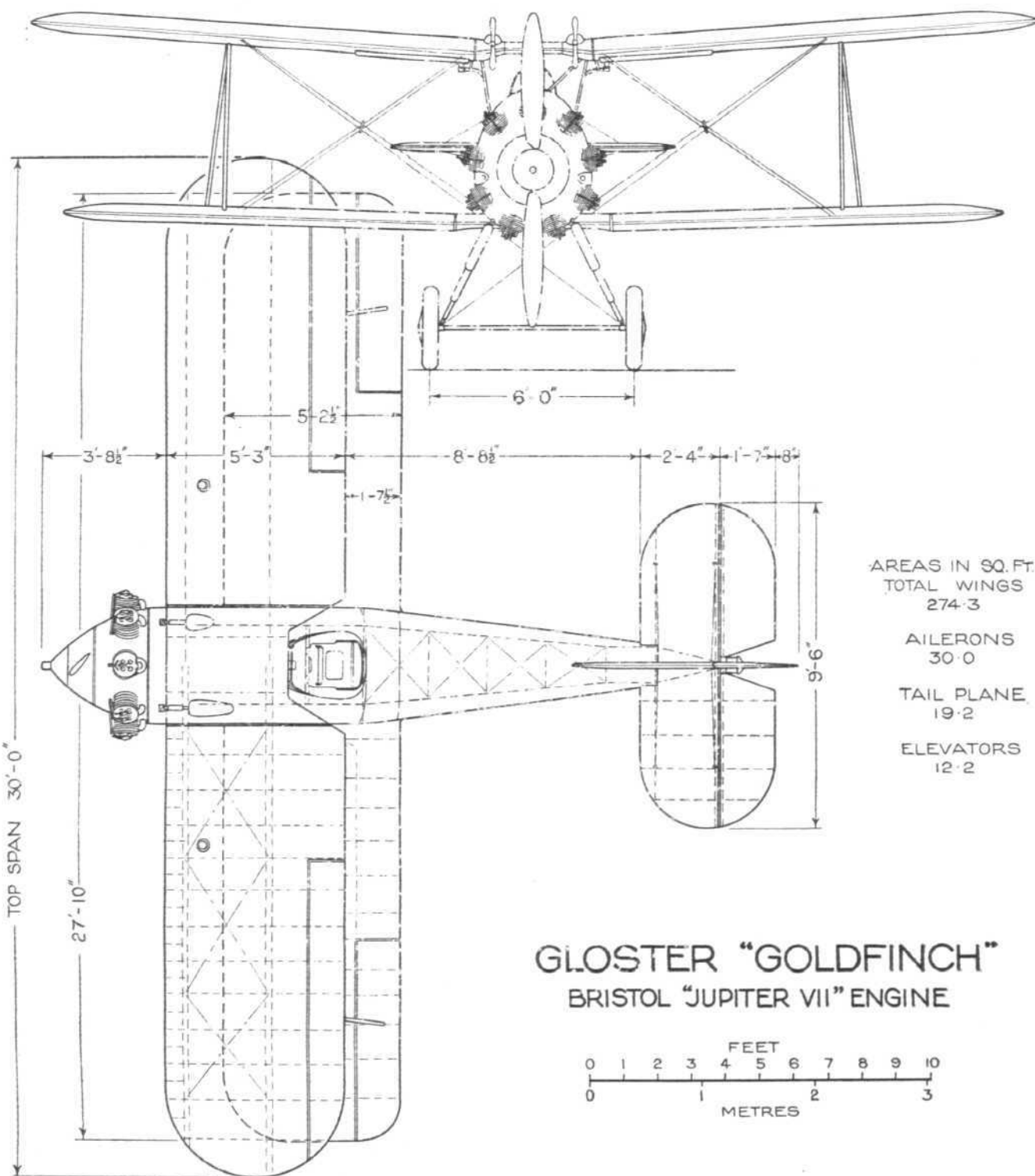
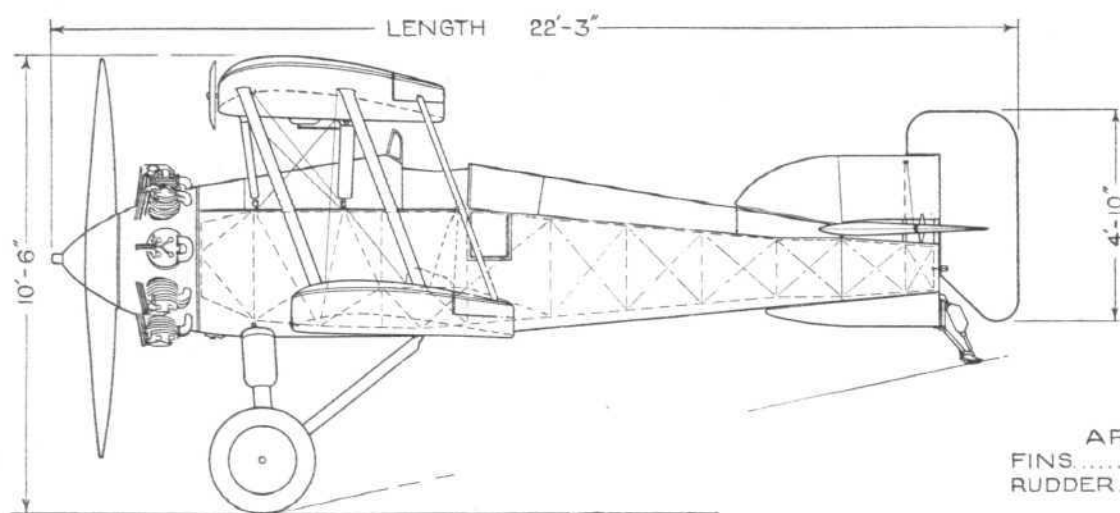


The Gloster
"Goldfinch":
Three-quarter
rear view.

["FLIGHT"
"Photograph"]

(253 km./h.). The climb of the "Goldfinch" is equally excellent, as will be realised when we state that the altitude of 20,000 ft. is reached in 16 mins. 9 secs. If we add that the "service ceiling" (*i.e.*, the altitude at which the rate of climb is 100 ft./min.) is 26,800 ft. (8,170 m.), it will be realised that the "Goldfinch" is a machine which, in point of performance, has few superiors.

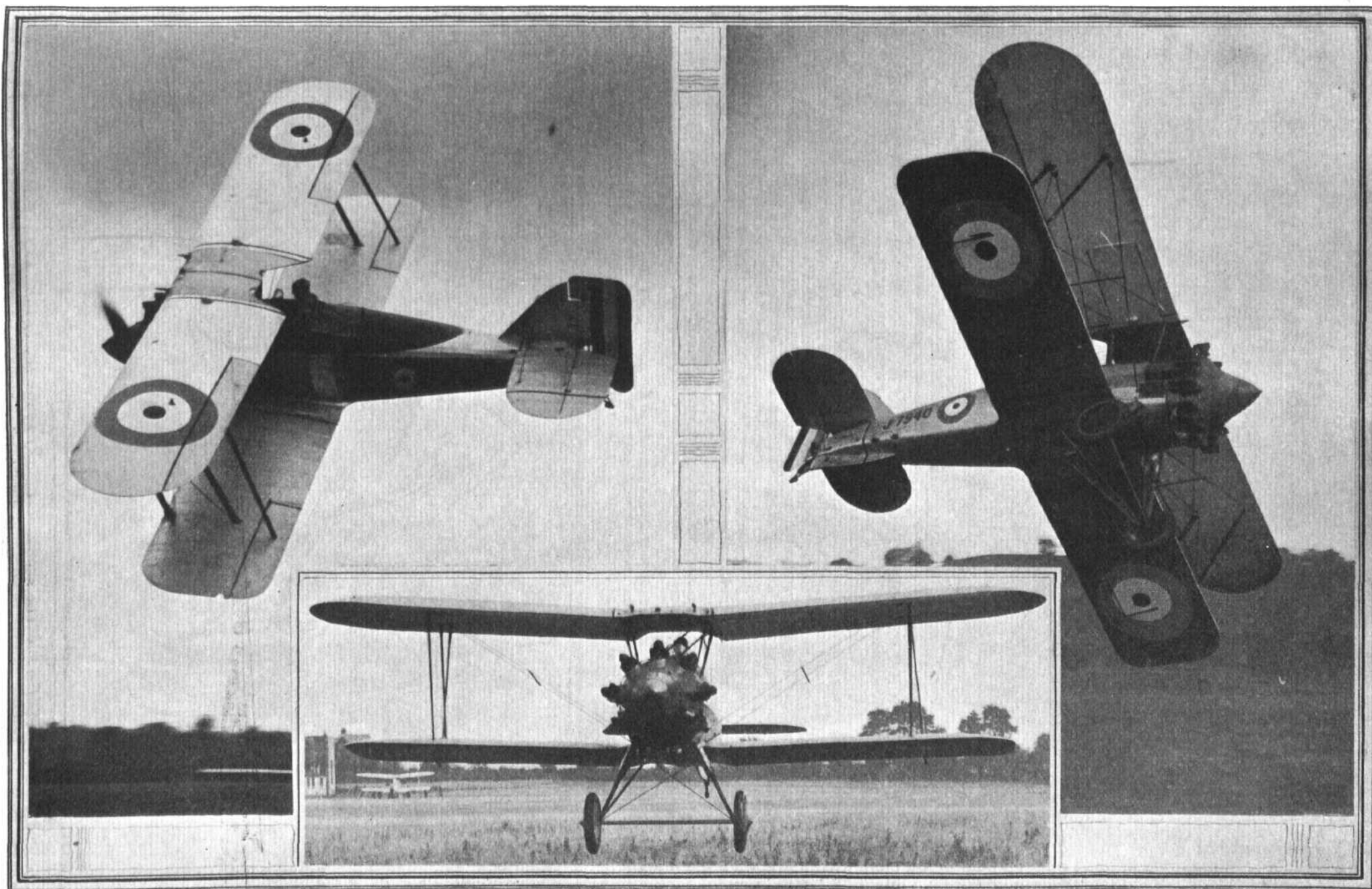
"Goldfinch," with Duralumin here and there to suit local requirements. The fuselage is a steel tube structure, in which use is made, in the front portion, of square-section tube for struts as well as longerons, no wire bracing being employed in this portion. The portion from aft of the pilot's cockpit to the stern post is built as a separate unit, bolted to the front one, and is of circular-section mild steel and Duralumin



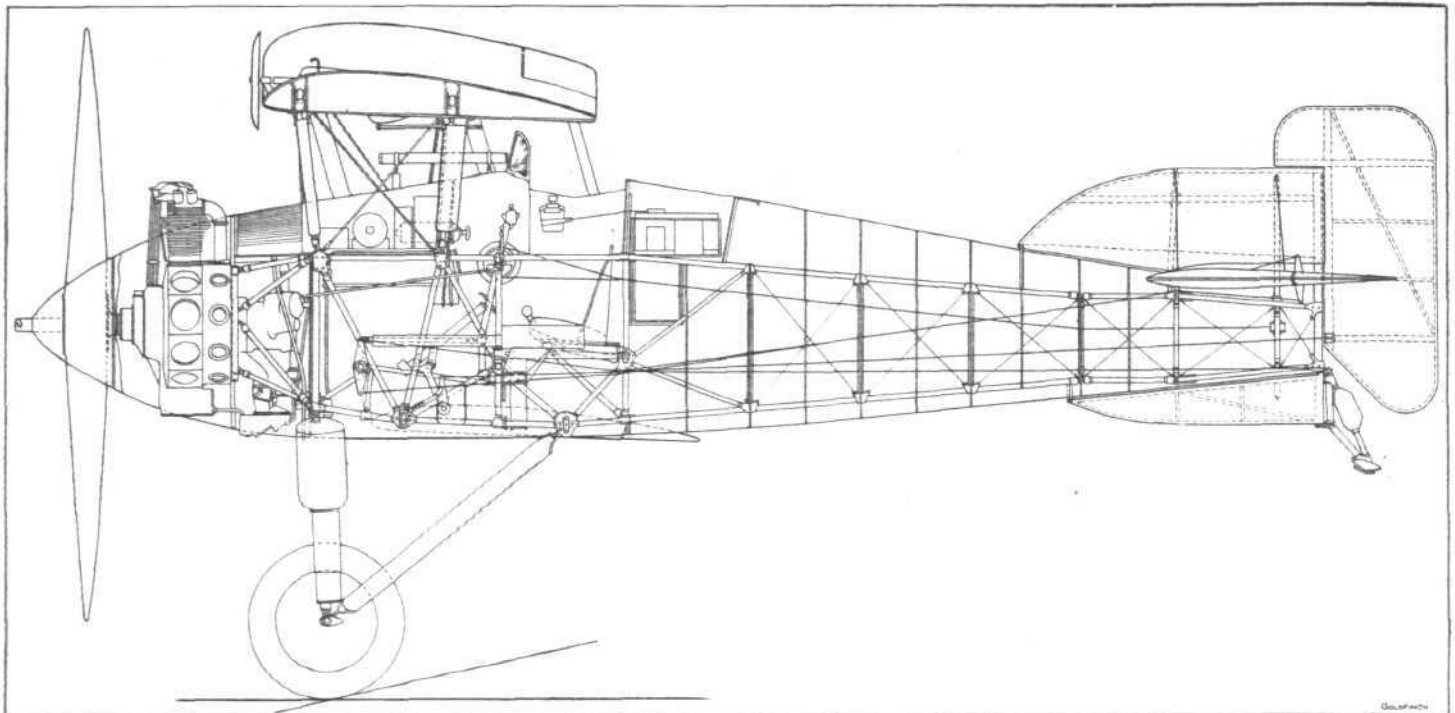
GLOSTER "GOLDFINCH"
BRISTOL "JUPITER VII" ENGINE



THE GLOSTER "GOLDFINCH": General Arrangement Drawings.



THE GLOSTER "GOLDFINCH": ALL-METAL SINGLE SEATER FIGHTER: Three views of the machine in flight, piloted by Flying Officer Howard J. T. Saint, D.S.C.



THE GLOSTER "GOLDFINCH" : In this side elevation many of the constructional features can be seen. Note also the "clean" tapering nose of the fuselage.

tubing, braced by tie rods. In the front portion, where the struts act both as tension and compression members, the joints between them and the longerons are flat mild steel plates bolted through struts and longerons, ferrules being inserted to prevent the flat-sided tubes from buckling when the nuts are tightened up.

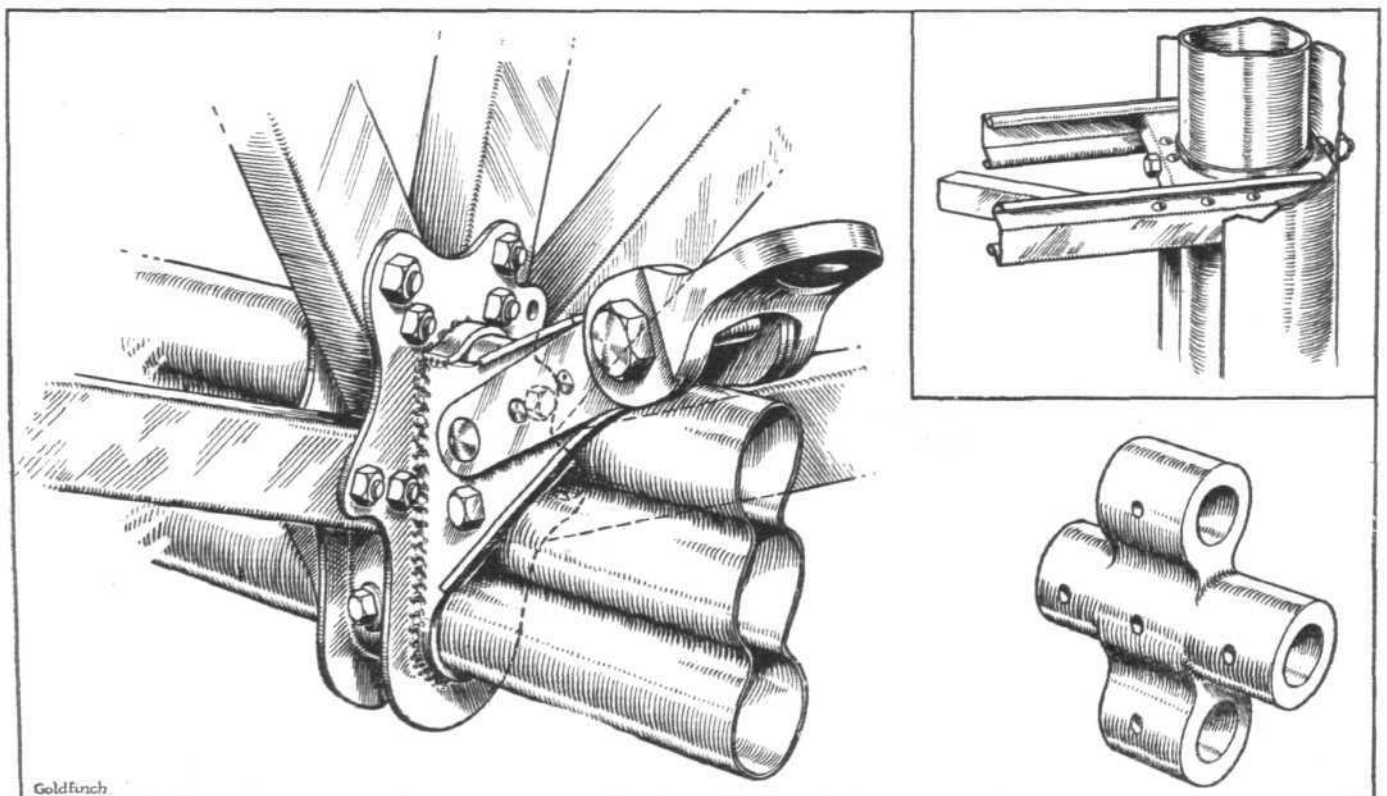
In the case of the rear portion, where the longerons and struts are of circular section and braced by tie rods, a different type of fitting has been used. This takes the form of a mild steel pressed plate fitting wrapped around the longeron and shaped to house the strut ends. Details are shown in some of our sketches.

Of particular interest as regards the front fuselage frame is the method of accommodating the steel spars of the lower centre-section or wing roots. The spars of the lower planes

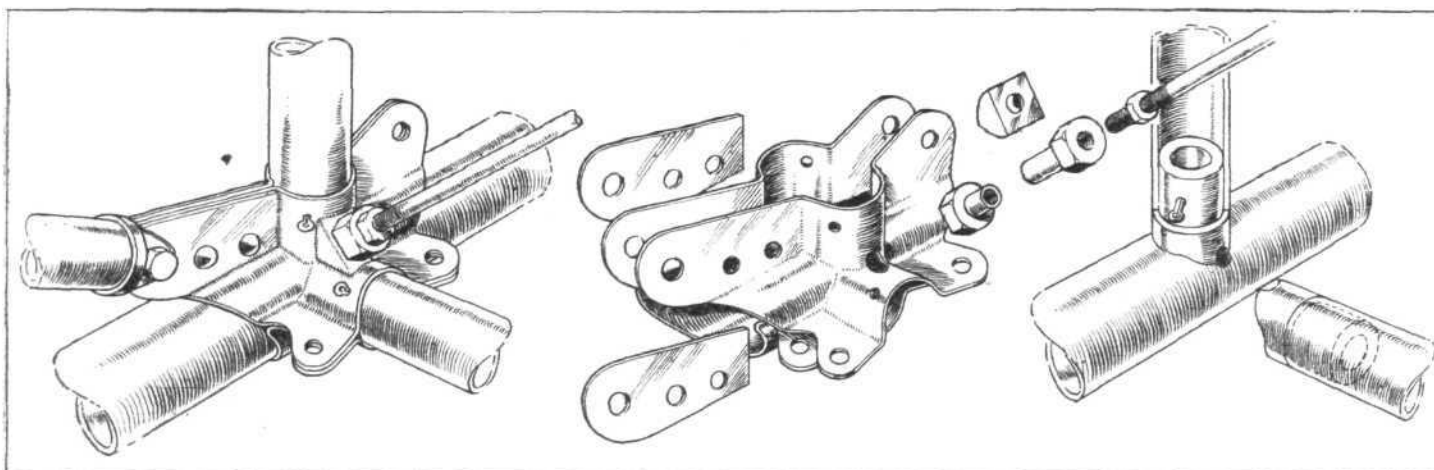
are of high tensile steel, of the section shown in one of our sketches. This type of spar starts life, so to speak, as a circular-section tube, and is then rolled to the "triple-barrel shot gun" section shown in the sketch. At the points where the spars are attached to the struts and longerons a Duralumin packing block is inserted, this block being machined to fit inside the spar section, as shown in the sketch.

The rectangular-section main structure of the fuselage is faired to a rounded section, the front fairing being of aluminium, while in the rear portion the formers are of wood.

Like the fuselage, the wings are of all-metal construction, with steel as the chief material. Reference has already been made to the form which the lower spars take. The top spars, also of high tensile steel, are of a different construction, with rolled top and bottom flanges of strip steel, diagonal bracing



THE GLOSTER "GOLDFINCH" : The sketch on the left shows the form of metal construction in the front portion of the fuselage, and the method of securing the rolled-steel spar. The packing block shown on the right is of Duralumin. The inset shows the rudder construction.



THE GLOSTER "GOLDFINCH" : Sketches illustrating the form of construction employed in the rear portion of the fuselage.

being used between top and bottom flanges. A false spar carries the narrow-chord ailerons.

The ribs, which are also of high tensile steel strip, are built up in the form of a Warren girder, with the top and bottom flanges and diagonal web members rolled to a trough section. There is, however, this difference that whereas in the flanges the edges are turned outwards, in the diagonal web members they are turned inwards. The web members are attached to the flanges by riveting.

The Bristol "Jupiter" Mark VII engine is mounted on a mild steel ring rigidly supported on struts which allow easy access to the engine, magnetos, etc. In the side elevation given on page 848, the arrangement of the engine mounting may be seen. In accordance with usual Gloster practice, the two petrol tanks are housed in the top planes, with direct gravity feed to the engine. The oil tank forms a cooler, and is let into the deck fairing behind the engine.

The tail plane, elevator, fin and rudder are also of steel construction, partly mild steel and partly high-tensile steel. The tail plane is arranged for trimming, being pivoted around its front spar, by means of a square-thread worm, sprocket wheel and cable.

The undercarriage, which is of wide track, is of the type in which the load is taken on rubber blocks working in compression, plates being interposed between adjacent blocks. Bouncing is prevented by an oil-damping device.

The pilot's seat is of the adjustable type, being raised and lowered by the movement of a lever. The weight of the pilot is taken by elastic shock absorbers, thus facilitating the raising of the seat while in flight.

Equipment

The "Goldfinch" is provided with a very full equipment, including wireless, parachute, two machine guns, ammunition, oxygen apparatus, and electrical equipment, as well as all the usual navigation and engine instruments. Owing to its relatively low landing speed (under 60 m.p.h.) and wide wheel track, the "Goldfinch" might well be used as a night fighter. In that case, an exhaust ring is fitted. The installation of the two generators (wireless and lighting and heating) is unusual in that they are built into the top centre-section, thus giving a minimum of drag.

Flying Qualities

Pilots who have flown the machine report that the "Goldfinch" is very manoeuvrable and easy to control, and that the cockpit is well arranged, roomy, warm and comfortable, while the view is good for fighting, bombing and ground machine gunning. It is stated to have no vices, and to be very easy to land.

Component Weights

The following details of item weights is interesting in

showing how the total loaded weight of 3,050 lbs. (1,387 kg.) is made up:—

Component	Weight	
	lbs.	kg.
Propeller	69	31.4
Engine	798	363.0
Starting magneto	8	3.635
Piping	15	6.82
Exhaust pipes	10	4.55
Top wings	253	115.0
Fuel and tanks	503	229.0
Struts and wires	53	24.1
Oil and tank	67	30.45
C.C. gear	17	7.73
Electrical equipment	22	10.0
Instruments	19	8.64
Bottom wings	157	71.4
Guns and mountings	67	30.45
Ammunition	97	44.1
Controls	35	15.9
Pilot	180	81.8
Seat and parachute	34	15.45
Very pistol	7	3.18
Oxygen apparatus	5	2.27
Wireless equipment	25	11.35
Tail	44	20.0
Bottom fin	7	3.18
Top fin	10	4.55
Rudder	10	4.55
Skid	9	4.09
Undercarriage	115	52.3
Sights	4	1.82
Fuselage and equipment	410	186.3

Total loaded weight .. 3,050 1,387.0

Performance

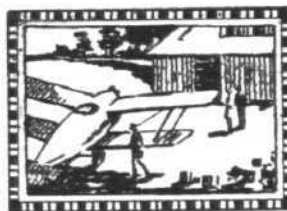
	mins.	secs.
Climb to 5,000 ft. (1,525 m.)	3	18
Climb to 10,000 ft. (3,050 m.)	6	30
Climb to 15,000 ft. (4,570 m.)	10	21
Climb to 20,000 ft. (6,100 m.)	16	9
Climb to 25,000 ft. (7,620 m.)	28	0
Absolute ceiling	28,000 ft. (8,539 m.)	
Service ceiling	26,800 ft. (8,170 m.)	
Speed at 10,000 ft. (3,050 m.)	172 m.p.h. (277 km./hr.)	
.. 15,000 ft. (4,570 m.)	167 m.p.h. (269 km./hr.)	
.. 20,000 ft. (6,100 m.)	157 m.p.h. (253 km./hr.)	
Landing speed	59 m.p.h. (95 km./hr.)	

Sir Philip Sassoon's Air Cruise

SIR PHILIP SASSOON left Plymouth on September 29 in the Blackburn "Iris" flying-boat (Rolls-Royce "Condors") on the first stage of the cruise to R.A.F. stations in the Middle East, Iraq and India. He was accompanied by Air Commodore A. M. Longmore, Director of Equipment. The pilots were Sqdr.-Ldr. C. L. Scott and Flight-Lieut. L. Martin. Nine people were on board all together. The

machine reached Marseilles the same day and Naples on September 30. There Sir Philip was greeted by Signor Balbo, Under-Secretary for Air in Italy, and General de Pinedo and Group-Capt. Bradley, British Air Attaché. The visit coincided with the arrival of the first machine flying on the new route, Rome-Naples-Syracuse-Tripoli. The "Iris" reached Aboukir on October 2, and Sir Philip changed over to a R.A.F. aeroplane and proceeded to Heliopolis (Cairo).

PRIVATE



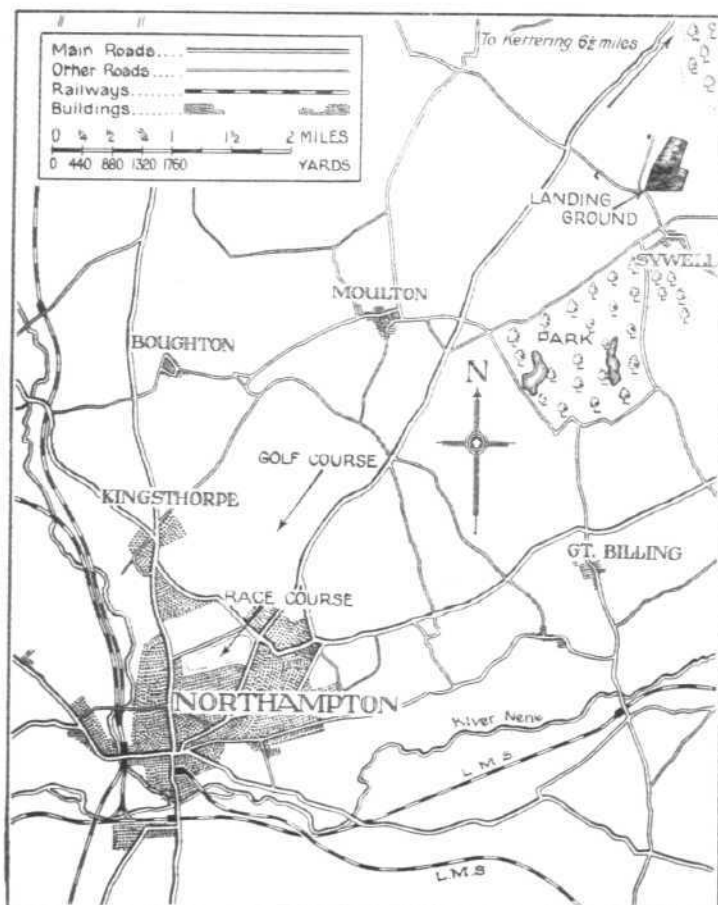
FLYING

A Section of FLIGHT in the Interests of the Private Owner, Owner-Pilot, and Club Member

NEW AERODROMES OF ENGLAND

Haldon and Sywell

Sywell Aerodrome, Northampton.—This is another new aerodrome. It has been established by the new Northamptonshire Aero Club. On the east side another field adjoins which, one believes, the club has acquired, and later it will enlarge the present field. As the site is in the centre



SYWELL AERODROME, NORTHAMPTON: Established by the new Northamptonshire Aero Club. It is in the centre of England, and a great future is expected for its utility. Approximate size:—800 yards by 500 yards.

of England, high hopes are felt for its wide use in the future. About £200 have been spent on it already. It is actually part of a farm and is leased from the farmer. Our map gives its exact position.

Haldon Aerodrome, Teignmouth, Devon.—This new aerodrome, a map of which accompanies this article, has been established by the Agra Engineering Co., Ltd., 7, Bank Street, Teignmouth, of which Flying-Officer W. R. Parkhouse (Reserve) is the managing director. It serves in particular the towns of Teignmouth (2 miles), Torquay (7 miles), Newton Abbot (5 miles), and Exeter (11 miles). There are no obstructions round it nearer than 500 yards and not even hedges, although the site is bounded on each side by a road, one being the Teignmouth-Exeter main road. It is 760 ft. above sea level, and sometimes low clouds will interfere with landings. When mist or fog abounds round the coast, however, the landing ground is often perfectly clear.

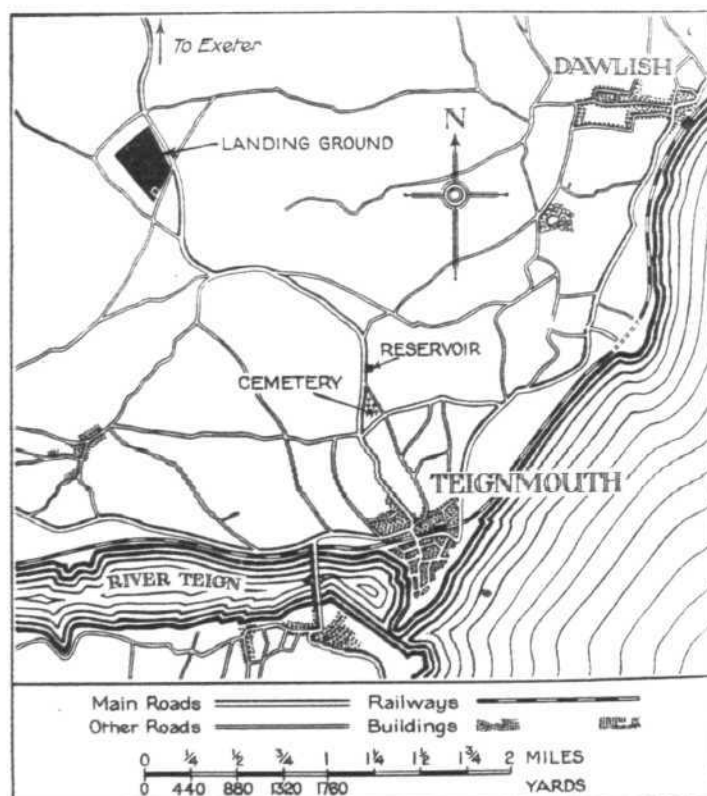
A landing circle is marked out and also the name "Haldon" in 16-ft. letters. The good landing area is also being marked out by means of a broken line of white flints—sections 3 ft. wide by 7 ft. long with a space of 10 ft. between each section.

The Agra Engineering Co., Ltd., are agents for the Avro



Flying-Officer W. R. Parkhouse (Reserve) (on right) and Mr. Phil. Pike in the Avro "Avian" which the former's company, The Agra Engineering Co., Ltd., of Teignmouth, use for demonstration purposes in the south-west of England where they represent "Avian" interests. Mr. Pike's company, P. Pike and Co., are sub-agents for Exeter, Plymouth and Bath. Both are pilots of long experience.

"Avian" in the district. They offer demonstration, tuition, and maintenance at their aerodrome. A steel-framed



HALDON AERODROME, TEIGNMOUTH, DEVON: A new licensed aerodrome for the South Devon district established by the Agra Engineering Co., Ltd., of Teignmouth, offering shed accommodation and service. Approximate size:—500 yards by 400 yards.

corrugated-iron covered shed with sliding doors has been erected to take two machines, and it has to be extended to take two more.

Possibly a club will be started in the district.

Brighton Aerodrome.—The reported size of this proposed aerodrome on the Downs near Portslade is 1,000 yards by 700 yards. We understand that the Founders' Trust, Ltd., are now completing the underwriting of the National Road Racing Track and Aerodrome (Brighton), Ltd., and that the issue will be brought out early in October. Contracts have been provisionally entered into which will ensure the opening of the track at Easter next, and a number of leading racing motorists have expressed their intention of participating in this important event. The aerodrome will be erected forthwith, and it is hoped the flying school, joy-riding and taxi service will be available in January.

Manchester.—Largely owing to the initiative of the Lord Mayor of Manchester (Mr. W. Davy), the question of securing a site for an aerodrome for the city, with a view to the ultimate establishment of civilian flying services on commercial lines, has again been considered, in spite of the failure to retain the 90 acres of land at Alexandra Park which was

used as an aerodrome during the War. The conference was held in private at the Town Hall. At the close the Lord Mayor, who had presided, stated that the object of the meeting had been to test the feeling of the business people in Manchester and to find out to what extent their co-operation could be relied on in an effort to establish an air port for the city. Representatives of the Chamber of Commerce, the Royal Exchange, the British Cotton Growing Association, the Cotton Association, the Association of Importers and Exporters, the Manchester District of the Federation of British Industries, the Manchester Ship Canal Company, the Corn, Grocery and Produce Exchange, and the Lancashire Aero Club attended. After discussion the following resolution was unanimously passed: "This conference recognises the need for an aerodrome being established in Manchester, and recommends the Corporation to arrange for a suitable site being reserved for this purpose without further delay."

The Lord Mayor undertook to bring the question before the Parliamentary Sub-Committee of the City Council. He hoped to persuade that body to make some recommendations or proposals in time for consideration at the October meeting of the City Council.

NEW PRIVATE OWNERS

The following names of Private Owners have not appeared in any previous table. They total 12.

Owners.	Machines.	Identification Letters.	Date of Registration.
G. F. Boyle ..	D.H. "Moth X"	G-AABH	11.9.28
J. J. Crammond ..	Avro "Avian III"	G-EBWR	14.9.28
G. R. Carpenter ..	D.H. "Moth X"	G-EBZL	31.7.28
Director of Surveys ..	Avro "Avian IIIa"	G-AABZ	25.9.28
J. C. Don ..	Avro 504K	G-EAJU	7.8.28
P. T. Eckersley ..	Avro "Avian III"	G-AABX	25.9.28
H. H. Leech ..	Avro "Baby"	G-EAUM	6.9.28
J. L. May ..	Avro "504 K"	G-AACA	28.9.28
R. F. Scarlett ..	"Gipsy-Moth"	G-AAAE	31.8.28
J. H. Thompson ..	D.H. "Moth X"	G-AAAC	10.8.28
Capt. J. M. S. Wardell ..	"Gipsy-Moth"	G-AAAO	31.8.28
G. A. Worth ..	D.H. "Moth X"	G-AAAD	15.8.28

The following table records the latest machines acquired by old private owners, all of whom have figured in one or another of our previous tables.

Owners.	Machines.	Identification Letters.	Date of Registration.
O. S. Baker ..	Supermarine "Solent"	G-AAAB	7.8.28
O. S. Baker ..	"Gipsy-Moth"	G-AAAS	31.8.28
Lady Bailey ..	"Gipsy-Moth"	G-AABM	14.9.28
R. P. Cooper ..	"Gipsy-Moth"	G-AAAV	30.8.28
Hon. G. Cuncliffe ..	"Gipsy-Moth"	G-AABO	14.9.28
Capt. F. E. Guest ..	"Gipsy-Moth"	G-AABK	14.9.28
Capt. G. de Havilland ..	"Gipsy-Moth"	G-AAAA	30.7.28
Capt. E. Hayes ..	"Gipsy-Moth"	G-AAAK	31.8.28
Capt. E. Hayes ..	Avro "Avian III"	G-EBYA	12.7.28

Lieut.-Com. G. Kidston "Gipsy-Moth" G-AAAJ .. 31.8.28

Maj. G. C. Maxwell .. "Gipsy-Moth" G-AAAM 31.8.28

G. A. R. Malcolm .. "Gipsy-Moth" G-AAAI .. 30.8.28

Miss W. Spooner .. "Gipsy-Moth" G-AAAL .. 30.8.28

The D.H. "Moths" in the top table not designated as "Gipsy-Moths" mean that they are fitted with the A.D.C. "Cirrus" engines. Capt. J. M. Wardell and Maj. G. C. Maxwell do not propose to take over delivery of their registered "Gipsy-Moths" until next Spring now. Mr. R. P. Cooper still owns his old D.H. "Moth" as well as the new "Gipsy-Moth" but one believes that he wishes to sell the former. The Hon. G. Cuncliffe has already sold his D.H. "Moth" now that he possesses the "Gipsy-Moth." He registered the former machine as far back as November, 1926. The owner of the Avro "Avian III," designated in our table as the Director of Surveys, is of British East Africa. Once again the Avro "Baby," G-EAUM, has changed stables. Before Mr. H. H. Leech took possession it belonged to Mr. R. Whitehead, who flew it in the last King's Cup Race, and before that it was jointly owned by Mr. L. E. R. Bellairs and Mr. F. G. Miles.

It should be mentioned that Lady Bailey is not attempting her present return flight from S. Africa to England on the "Gipsy-Moth" registered in her name. That awaits her possession. Capt. E. Hayes who, like Mr. O. S. Baker, has a string of two, registered his first D.H. "Moth" as far back as April, 1927.

The Hon. Capt. F. E. Guest, M.P., appears in every new table now as the owner of a new machine. A recent acquisition besides the "Gipsy-Moth" was a Junkers F 13. Miss Spooner flew her new "Gipsy-Moth" to the Northampton air meeting on Saturday, September 29, taking Mr. Norman Hulbert, the pilot, as her passenger.

MONTREAL LIGHT AEROPLANE CLUB

This club was one of the first formed in Canada under the Government Scheme, and took delivery of its first D.H. "Moth" Mk. II Cirrus on May 12, Captain Sparks, the Chief Instructor, flying the machine from Camp Borden with Mr. Jaques Cartier, a director of the club, as passenger; and on arrival at the aerodrome the President, Vice-President and several directors of the club made passenger flights, and instructional flights commenced. The club took delivery of its second aeroplane, another D.H. "Moth" Mk. II Cirrus, on May 24, this machine being collected from Messrs. De Havilland's Aerodrome at Toronto by Captain Sparks, with Mr. Frank McGill, a director, as passenger.

These two machines have been given to the club, under certain conditions, by the Canadian Government, who are extensively supporting the light aeroplane movement throughout Canada.

The club having 161 flying members and 58 associate members (non-flying members permitted, however, to have passenger flights), it was soon decided that another machine was necessary and that an assistant instructor should be appointed. A further machine, a De Havilland "Moth" Mk. II Cirrus, was ordered and delivered direct to St. Hubert Aerodrome on July 16 by Messrs. De Havilland's

test pilot, who carried Mr. C. Gordon Brown, a director, as passenger.

The club, having purchased this machine, will be entitled to a further machine from the Canadian Government, and it will be allotted to the club during the year, and this will bring the strength of the club's machines to four D.H. "Moths" Mk. II Cirrus; but the club is contemplating purchasing yet another D.H. "Moth" to cope adequately with the members' requirements.

The club is fortunate in being able to operate from St. Hubert Aerodrome, which will be the main air port of Canada. The aerodrome is at present being thoroughly tile-drained and the surface most carefully prepared; excellent roads are being made. Adequate hangars, offices, etc., are to be erected. Custom officials are always present. The aerodrome has an excellent main road to it, and already has its private railway siding, and when the work is completed the aerodrome will compare most favourably with any in the world, comprising as it does some 750 acres of dead level ground, placed in the most ideal flying country. Air mails are already regularly operating from it, and these services are to be greatly increased in the near future. Fairways are being prepared which will withstand any weather conditions, to enable daily

flying to take place, except those aerodromes that have sandy sub-soil. Winter conditions and thaws require very elaborately prepared fairways to enable daily flying. Sand, however, has distinct disadvantages, wind being the greatest enemy, causing dunes and pot-holes.

The club this season has been badly handicapped by the very wet and windy summer experienced, and in the period May 12 to August 31 flying was impossible on 30 days and badly interfered with on 16 days. Next summer, when the work on the aerodrome will be completed, the weather should not interrupt flying so badly.

Captain Spooner arrived in Montreal on August 25 to act as assistant instructor, and the flying returns should make more satisfactory reading in the near future.

Captain Sparks has very kindly been given assistance in the evenings and at week-ends by Captain Trim, Mr. R. H. Foss and Mr. O. C. S. Wallace.

Up to August 31 the club had done 470 hrs. 25 mins. flying, of which 328 hrs. 5 mins. were dual instruction, 92 hrs. 10 mins. solo, and the balance, 50 hrs. 10 mins., was made up with passenger and test flights.

The club already has 35 soloists, 23 being old pilots who, after refresher lessons, are regularly doing solos, and 12 *ab initio* soloists, including one lady. Further 78 members are receiving instruction, and some 18 are ready for solo and awaiting favourable conditions.

List of Soloists

Old pilots:—Captain Trim, R. H. Foss, L. J. St. Jean, W. S. Lighthall, E. F. Peacock, G. C. Upson, P. S. Fisher,

O. C. S. Wallace, H. H. Cotton, J. G. Ireland, D. Cushing, J. H. Badgley, Lawson Williams, E. C. R. Stoneman, C. Dixon, L. R. Lavigne, P. Pinel, M. J. Berlyn, H. St. Martin, P. Thibandeau, R. F. Burnett, P. G. Lewis, J. E. Lytell.

Ab initio soloists:—J. W. McConnell, Jr., E. B. F. Reddy, Mrs. E. B. F. Reddy, N. Ranger, G. H. Dorais, D. Vachon, H. G. Marpole, L. Knight, L. J. Beaudoin, G. L. Ballantyne, J. Ballantyne, J. Cawley.

REGINA AERO CLUB, CANADA

Writing from Winnipeg, F. O. H. J. Phillips of the R.A.F.O., says:—"The Regina Club was started last June and has one hangar at present, but the city is going to build them a better one presently. They have two 'Moths' and one 'Swallow' plane.

"The 'Swallow' looks a nice machine and is braced in every direction possible. It has a Curtiss engine of about 100 h.p.

"Membership costs \$10 a year, and a flight costs \$5 for a quarter of an hour. They charge enough to clear expenses and make a profit on every run, and their machines were bought without gifts by really wealthy people.

"The Government gives them a grant of \$100 for each pupil trained.

"There is no lack of landing grounds round here, as the prairie is quite level and covered with obstructionless grassy lands. There are two instructors and one mechanic.

"I am a member of the Bristol and Wessex Light Aeroplane Club."

LIGHT PLANE CLUBS

London Aeroplane Club, Stag Lane, Edgware. Sec., H. E. Perrin, 3, Clifford Street, London, W.1.

Bristol and Wessex Aeroplane Club, Filton, Gloucester. Secretary, Major G. S. Cooper, Filton Aerodrome, Patchway.

Cinque Ports Flying Club, Lympne, Hythe. Hon. Secretary, R. Dallas Brett, 114, High Street, Hythe, Kent.

Hampshire Aero Club, Hamble, Southampton. Secretary, H. J. Harrington, Hamble, Southampton.

Lancashire Aero Club, Woodford, Lancs. Secretary, F. W. Atherton, Woodford Aerodrome, Cheshire.

Liverpool and District Aero Club, Hooton, Cheshire. Hon. Secretary, W. F. Davison, 357, Royal Liver Building, Liverpool.

Midland Aero Club, Castle Bromwich, Birmingham. Secretary, Maj. Gilbert Dennison, 22, Villa Road, Handsworth, Birmingham.

Newcastle-on-Tyne Aero Club, Cramlington, Northumberland. Secretary, J. T. Dodds, Cramlington Aerodrome, Northumberland.

Norfolk and Norwich Aero Club, Mousehold, Norwich. Secretary, G. McEwen, The Aerodrome, Mousehold, Norwich.

Nottingham Aero Club, Hucknall, Nottingham. Hon. Secretary, Cecil R. Sands, A.C.A., Imperial Buildings, Victoria St., Nottingham.

The Scottish Flying Club, 101, St. Vincent Street, Glasgow. Secretary, Harry W. Smith.

Southern Aero Club, Shoreham Sussex. Secretary, C. A. Boucher, Shoreham Aerodrome, Sussex.

Suffolk Aeroplane Club, Ipswich. Secretary, Maj. P. L. Holmes, The Aerodrome, Hadleigh, Suffolk.

Yorkshire Aeroplane Club, Sherburn-in-Elmet, Yorks. Secretary, Lieut.-Col. Walker, The Aerodrome, Sherburn-in-Elmet.

LONDON AEROPLANE CLUB

REPORT for week ending September 30.—Flying time, 60 hrs. 30 mins. Dual instruction, 32 hrs. 25 mins. Solo flying, 28 hrs. 5 mins.

Dual instruction (with V. H. Baker):—L. Hirachand, L. D. Trappitt, P. W. Hoare, C. D. Blackett, G. Charles, J. W. H. Harrison, E. L. Gosling, H. R. Presland, L. Gaywood, Miss A. Johnson, H. Sutton, Miss Fletcher, H. D. Wolfson, A. L. Hill, A. D. Blumlein, A. M. Leonard, R. F. Adams, Lieut.-Col. A. G. Farfan, E. Davis, J. F. Wood, D. A. Litchfield, L. Rowson, A. C. Thomas; (with F. R. Matthews):—A. D. Blumlein, L. Hirachand, Miss Johnson, B. S. Whidborne, A. M. Leonard, E. J. Puddy, Miss Wilson, J. M. Symmons, H. A. Giers, G. E. Clair, E. Davis, E. W. Hosley, J. V. Fairbairn, S. Hansel, Miss Cholmondeley, A. J. Richardson, Miss Hicks, R. F. G. Adams, J. C. V. K. Watson, Capt. The Master of Gray, C. D. Blackett, Lieut.-Col. A. G. Farfan, J. W. P. Chalmers, J. A. Crane, J. F. Wood.

Solo flying:—E. S. Brough, Miss Hicks, H. C. Bergel, Miss Fletcher, W. Hart, F. O. S. Hosley, J. W. H. Harrison, C. Campbell, G. H. Craig, N. J. Hulbert, A. Hill, G. Charles, J. W. P. Chalmers, Miss Wilson, R. Ward, W. L. M. O'Connor, Capt. Roche-Kelly, P. W. Hoare, T. Elder-Hearn, J. F. Wood, A. F. Burns, C. E. Murrell, H. Sutton, G. E. Clair, J. V. Fairbairn, E. D. Moss, O. J. Tapper, J. A. G. Haslam, C. Wood, J. C. V. K. Watson.

Passenger flights:—Miss Campbell, Mrs. Whidborne, C. H. Tutt, Mrs. Chalmers, Miss Terry, N. Shelley, A. Gregson, Mrs. Lockhart, M. L. Casson, G. C. Gregson, Mrs. M. Gregson, Mrs. Haslam.

During the week, Mr. J. V. Fairbairn and Miss M. Hicks passed the necessary tests to qualify them for their "A" Licence.

Northampton Air Pageant.—The London Aeroplane Club sent G-AABL to the Northampton Air Pageant, the pilots being Mr. F. R. Matthews and J. M. Symmons.

Monthly Flying Return.—The total flying for the month of September was 305 hrs. 15 mins.

	Hrs.	Mins.
Dual instruction	187	40
Solo flying	117	35

During the month, 12 members qualified for their "A" Licence.

BRISTOL & WESSEX AEROPLANE CLUB, LTD.

REPORT for week ending September 30.—Total flying hours, 21 hrs. 50 mins. Dual instruction, 12 hrs. 15 mins. Solo flying, 7 hrs. 40 mins.

Instruction with Mr. Bartlett:—Miss Miles, Messrs. Davis, Amory, Keeling, Rogers, Rivers-Pollock, Byrnes, Hughes, D. B. Singh, R. S. W. Clarke, Tinson, Dutton, B. L. Bathurst.

Instruction with Mr. Tratman:—Mr. D. B. Singh.

Soloists:—Mr. Downes-Shaw, Miss Miles, Messrs. Amory, Keith-Jopp, Greenhill, R. S. W. Clarke, and Hon. B. L. Bathurst.

Cross-country:—Mr. Bartlett and Mr. Rivers-Pollock to Bournemouth-Weymouth-Lyme Regis and return.

Mr. Downes-Shaw with Mr. Amory to Tiverton and return.

The fine weather has definitely come to an end, and the ideal flying conditions have given place to what is best described by a terse expressive word

that has not, as yet, been adopted in the official phraseology of the Meteorological Office.

Major G. S. Cooper, D.S.O., has now replaced Capt. C. F. G. Crawford as Secretary of the Club, the latter having resigned. This is therefore the last of "Uncle Dick's" reports.

On the 27th, Mr. Downes-Shaw started from Filton in G-EBST to fly to Manchester, on business. Near Kidderminster the weather was so thick that, after making three attempts to get through, he returned to Brockworth and continued his journey by train. He returned from Brockworth on the 28th.

CINQUE PORTS FLYING CLUB

REPORT for week ending September 29.—Machines, de H. Moths S.S. and N.N. Total flying time, 16 hrs. 55 mins. Special journeys and test flights, 6 hrs. 30 mins. Joy rides with Maj. Clarke (four), 40 mins.

Dual instruction with Maj. Clarke.—Capt. Took, 30 mins.; Mr. Mackinnon, 4 hrs. 30 mins.; Mr. Walsh, 30 mins.; Mr. Edgson Wright, 15 mins.; Mr. Wood, 30 mins.; Mr. Skinner, 15 mins.; Mr. Maurice Braddell, 15 mins.; Mr. Parks, 30 mins.; total, 7 hrs. 15 mins.

Soloist under instruction.—Mr. Skinner, 30 mins.

"A" Licence Pilots.—Mr. Skinner, 15 mins.; Mr. Story, 45 mins.

On Monday, September 24, Maj. Clarke and Mr. Mackinnon flew N.N. to Hamble for the Hampshire Club's dance, returning on Wednesday, September 26.

Another of our members, Capt. Rattray, took a party by road.

On Saturday, September 29, Mr. Skinner, of Ashford, took advantage of the return of S.S. to pass his tests for "A" licence, making the seventh certificate the club has taken since it started operations in the middle of May. We hope that Messrs. Mackinnon and Walsh will soon be ready to pass their tests.

The members decided to repaint N.N. themselves, and there was much activity in this direction over the week-end. N.N. came from the London Club, which is apparently subsidised by Mr. Colman to paint its machines in imitation of his indispensable product. This was more than some of our aesthetic members could stand.

Arrangements are already under way for another meeting at Lympne next Easter, designed to be bigger and better in every respect than last Easter's successful inaugural meeting. Special attention will be given to refreshments and facilities for joy riding, the lack of both of which caused some inconvenience on the last occasion. Details of the programme, etc., will be announced later.

HAMPSHIRE AEROPLANE CLUB

REPORT for week ending September 28.—Total flying time, 27 hrs. 25 mins.

Dual instruction, 16 hrs. 5 mins.; "A" pilots, 9 hrs. 35 mins.; solo, 45 mins.; passenger flights, 30 mins.; instructors' solo and tests, 30 mins.

Instruction: (With Flight-Lieut. Swoffer and Mr. W. H. Dudley).—Messrs. Farmer, Shepherd, Reuther, Buckley, Tobutt, Beagley, Endacott, Cater, Gibbs, Evans, Inglis, Evershed, Milford, Mattocks, Lieut. Coode, Lieut. Des Graz, Miss Home, Comdr. Coveney, Mrs. Gordon Smith, Lieut. Roskill, Comdr. Bell, Maj. Thorn, Maj. Jenkins, Lieut. Oswald.

"A" Pilots.—Messrs. Wills, Parker, Curtis, Nuthall, Rayson, Sanders, Clark, Lieut. Heath, 2nd Lieut. Luard, F/O Hayter, Capt. Kirby, Miss Grace. Soloists.—Mr. Hall, Lieut. Townsend. Passengers.—Messrs. Ripley, Bromley, Miss Oliver, Miss Spring, Miss Melville.

We are still struggling along with one Moth but we anticipate having two machines out in a few days' time. It is good news to hear that the Avian will probably be in commission again towards the end of October.

We were unable to fly at all on Friday owing to the vile weather. N.B.—We understand that the chief instructor has standardised his reply to the question mentioned last week. His comments would, however, appear to be more suited to the atmosphere of the smoke room than to the printed page of an Aviation journal.

LANCASHIRE AERO CLUB

REPORT for week ending September 29.—Flying time, 11 hrs. 50 mins. Instruction, 4 hrs. 10 mins.; solo flights, 3 hrs. 55 mins.; passenger flights, 2 hrs. 50 mins.; tests, 55 mins.

Instruction: (With Flight-Lieut. Todd).—Eckersley, Kay, Weale, Ashworth, J. H., Ashworth, W., Miss Baerlein, Goss, Miss Emery. (With Mr. Cantrill).—Dane. (With Mr. Scholes).—Chart, Barlow, Dane, Ginger. (With Mr. Brown).—Foote, Roberts.

Soloists (under instruction).—Weale. Pilots.—Cohen, Michelson, Twemlow, Lacayo, Crosthwaite, Ruddy, Miss Baerlein, Riley, Mills, Caldecott.

Passengers: (With Mr. Caldecott).—Agar, Goss. (With Mr. Hall).—Ginger, Mrs. Morgan. (With Mr. Cantrill).—Marsh. (With Mr. Lacayo).—Marsh, Miss Williamson, Whitehouse. (With Mr. Twemlow).—Mills, Marsh. (With Mr. Leeming).—Rowlands. (With Mr. Scholes).—Mrs. Bryce. (With Mr. Michelson).—Williams.

LIVERPOOL & DISTRICT AERO CLUB

REPORT for week ending September 29.—Total flying time, 27 hrs. 45 mins., dual, 14 hrs. 15 mins.; cross-country flights, 5 hrs. 20 mins.

Dual: (With Mr. Allen).—Messrs. Alcock, Barnes, Barker, Cowan, Curwell, Davey, Edgar, Eills, Foley, Goodman, Keniston, McGeagh, Reville, Sparke, E. H. Williamson, Rev. Woosnam-Jones, Mrs. Eills, Miss Evans, Miss Hill, Miss Hughes.

"A" Licence Flights.—Messrs. Brookings, Davison, Leete, Ward. Soloists under instruction.—Messrs. Barber, Francis, Henderson, Moulds, Willcox, E. H. Williamson.

Joyrides: (With Mr. Allen).—Mrs. Goodman. (With Mr. Ward).—Messrs. Barker, Hughes, Alcock, Miss Henderson. (With Mr. Davison).—Mr. Vaughan.

On Wednesday, Mr. Ward took one of our "Avians" on a 40 mile cross-country journey to Woodford. The return journey took about 3 hrs., as the machine which is lettered with the mystic sign "XX" took the bit between its teeth and refused to return by the direct route, until it had visited its spiritual home of Burton-on-Trent. After landing there and refilling with a liberal amount of juice, it returned in quite a docile (if unsteady) manner to Hooton, arriving just before dusk. After a good night's rest "XX" was as fit as ever in the morning.

Visitors.—Sunday, September 23: General Branker—G-EDCA. Monday, September 24: Duchess of Bedford—"Moth" G-EBRI. Barnard, Pilot—London to Scotland. Friday, September 28: Renault Avro-Lancs School of Aviation (Lytham). Bringing Dirt Track expert. Taylor, returned following day.

Messrs. Bailey and Drew, pilots of the Calcutta, which is flying from Liverpool to Belfast, paid us a visit on Thursday evening.

Mr. Marsden of the A.I.D. visited us on Sunday last, and was very pleased with his inspection.

MIDLAND AERO CLUB

REPORT for week ending September 29.—Total flying time was 40 hrs. 27 mins. Dual, 18 hrs. 5 mins. Solo, 17 hrs. 45 mins. Passenger 4 hrs. 5 mins. Test, 32 mins.

Dual instruction with Flight-Lieut. T. Rose, D.F.C., and Mr. W. H. Sutcliffe: Messrs. Blakeway, W. L. Handley, C. T. Davis, J. Fitzgerald, J. A. Ridsdale, S. G. Hall, G. P. Haylock, M. C. Wilks, F. J. Steward, H. Coleman, J. B. Briggs, D. N. Khatri, J. W. Astley, W. Smith, J. K. Morton, J. A. V. Cook, F. D. Scott, S. Duckitt, A. E. Colman, Dr. W. G. Tilleke, Capt. J. C. Chaytor, Mrs. Leigh Fermor.

Soloists: Messrs. E. P. Lane, W. M. Morris, W. J. Steward, S. H. Smith, Capt. J. C. Chaytor, Messrs. R. C. Baxter, G. Robson, H. Coleman, E. D. Wynn, A. E. Colman, R. D. Bednell, E. L. Hulme, J. A. V. Cook, M. A. Murtagh, W. J. Halland, S. Duckitt, J. B. Briggs, J. K. Morton, S. G. Hall, R. L. Jackson, H. J. Willis, Dr. W. G. Tilleke, Messrs. E. R. King, J. Fitzgerald, G. C. Jones, C. W. Fellowes, A. B. Gibbons, J. W. Astley.

Passengers: Messrs. N. C. Harrison, E. Hanson, Dr. Johnson, Messrs. W. L. Handley, J. R. Rochford, J. H. Green, R. C. Flanagan, N. R. Greathead, Miss A. Bingham, Miss J. Davis.

Messrs. E. L. Hulme, F. J. Steward and J. A. V. Cook passed all tests for their "A" licences.

Dr. W. G. Tilleke, Messrs. J. Fitzgerald and A. E. Colman made first solos.

On Saturday Flight-Lieut. Rose flew XT to Sywell for the Pageant. Congratulations to the Northampton Club on a very good first effort.

NORFOLK & NORWICH AERO CLUB

REPORT for week ending September 30.—Total flying time, 29 hrs.

Dual with Mr. Young: Messrs. H. N. Justin, W. S. Coates, L. Morter, C. Brown, C. Ransom, G. Throver, A. Kirkby, J. Luddington, L. W. Lowen, R. Harvey.

Soloists: Messrs. W. S. Coates, G. Wharton, N. Brett, E. Varden Smith, E. Lambert, A. A. Rice, H. Neave, H. Pank, N. Lindley, W. P. Cubitt, R. T. Harmer, L. W. Lowen, C. Ransom, R. F. Moore, G. F. Surtees, A. V. Harvey, A. G. Marshall, W. A. Ramsay, C. Land.

Passengers: 9.

Messrs. C. Ransom and W. S. Coates have distinguished themselves by their first solos this week without breaking anything. They were really very good efforts, and they should soon follow up by taking their licences. The weather has broken at last, and our flying time with it. Nevertheless, we fly every available moment, and we have been fortunate enough to keep two machines continuously in commission for the last three weeks. That certainly is worthy of comment. On Saturday they both went over to Northampton to give the Northampton Club the best wishes at their Pageant. Both machines arrived back on Sunday afternoon.

On Thursday evening next Dr. Odgers is giving a very good lecture at the Club House on "Wind Channel and Streamlining." This all sounds very interesting, and knowing Dr. Odgers' usual style, we look forward to a good evening.

NOTTINGHAM AERO CLUB

REPORT for week ending September 28.—Flying time, 26 hrs. 5 mins. Instruction, 5 hrs. 45 mins. "A" pilots, 9 hrs. 20 mins. Solo (under instruction), 6 hrs. 20 mins. Passengers, 2 hrs. Tests, 2 hrs. 40 mins.

Instruction (with Mr. Martin): Messrs. Thorpe, Lucas, Hutchinson, Cox, Cudlip, Austin, Kay, McWilliam. Solo, "A" licence: Messrs. Wynn, Bradley, Pilgrim, Silvey, Whitby, A. A. Austin, Granger.

Solo (under instruction): Messrs. Hancock, Shipside, Winn, Austin, Glinn.

Passengers: Miss Loney, Mrs. Silvey, Messrs. Hall, Biraminham, J. Granger, Hirst, Gilbert, Dickson, Glinn, Westley, Wrangham, Bird.

During the early part of this week, fog and rain have considerably restricted flying. On Wednesday last, Mr. Shipside—one of our recent *ab-initio*s—was doing his height test during which he succeeded in losing the aerodrome, and he was so successful that he discovered a village near Sheffield. Apparently he was more interested in height and clouds than Hucknall Aerodrome. However, he made a good landing, choosing a good field, alongside a main road and not too far from the local Pub., but, unfortunately, D.O.R.A. intervened. Mr. Martin went over by road to fly it back and found Mr. Shipside and machine surrounded by an admiring crowd of 300 souls. Apart from the fact that he should not have lost sight of the aerodrome, he put up an excellent show all round. The Graph showed he had been up to 10,000 ft., and in descending it appeared to show a loop, two flick rolls and a spin. We have a lot more interesting news, but no time to write more, as the Skywriters have departed and we are so busy taking an inventory of everything.

SUFFOLK & EASTERN COUNTIES AEROPLANE CLUB

REPORT for week ending September 29.—Flying time, 14 hrs. Instruction with Mr. Lowdell, 5 hrs. 10 mins. "A & B" pilots, 3 hrs. 10 mins. Solo, under instruction, 3 hrs. 55 mins. Passenger flights, 55 mins. Tests, 50 mins.

Dual instruction with Mr. Lowdell: Mrs. Young, Dr. Dunn, Messrs. Welsh, Hanson, T. and B. F. Marriage, Wedd and Collins.

Solo under instruction: Mr. H. B. Collins.

"A & B" pilots: Dr. J. C. Sleight, Messrs. Billinton and Brown.

Passengers with Mr. Lowdell: 9.

Mr. H. B. Collins carried out his first solo and completed his tests for "A" licence during the week.

On Saturday Dr. J. C. Sleight, with Mr. H. B. Collins as passenger, flew over to Sywell on "Bluebird" S.Z. to take part in the Northampton Air Display.

YORKSHIRE AEROPLANE CLUB

REPORT for week ending September 29.—Flying time: 26 hrs. 20 mins. Dual, 5 hrs. 35 mins. Solo, 19 hrs. 45 mins. Passengers, 1 hr.

Instruction (with Captain Beck): Miss Ellison, Messrs. Brackenbury, Dujardin, Fitton, Gaunt, Lloyd, Ostler, Palmer, A. Senior.

Soloists: Miss Ellison, Messrs. Dujardin, Fitton, G. A. Little, A. Senior. "A" Licence pilots: Messrs. Birch, Brackenbury, Clayton, A. Crowther, Dawson, Dick, Ellison, Mann, Thomson, Wilson, Wood. Passengers, 6.

On Monday last we took the whole of our fleet of aircraft (both of them): all our really active members (Messrs. Thomson, Clayton and Ellison): and all our instructors (Captain Beck) to Brough to witness the launching of the "Iris." The Blackburn Aeroplane Company were very hospitable, and the Yorkshire Aeroplane Club enjoyed its day out very much, and those members who attended are now looking forward to our Christmas weather in order that they may get a bit of boat and seaplane training on our aerodrome.

Congratulations to Miss Margaret Ellison on a splendid solo effort after a lot of keen perseverance in flying, and in surmounting some even greater difficulties.

The tests for three "A" licences have been skilfully and successfully attacked this week by Messrs. Fitton, Dujardin and G. A. Little. In each case the accuracy of judgment in landing near the mark was highly commendable, and long may they continue to make soft landings as close to their intended destination.

Mr. George Wood has found his hat.

FROM THE FLYING SCHOOLS

The De Havilland Flying School, Stag Lane Aerodrome

REPORT from August 27 to September 23.—Total flying time, 756 hrs. 50 mins. Instruction (dual), 277 hrs. 10 mins., (solo) 365 hrs. 5 mins. Other flying, 114 hrs. 35 mins.

During the last month 36 pupils have completed courses, and the work on the school is now slackening a little in consequence.

Two of our Indian pupils have completed their elementary courses and are now almost ready for solo on advanced types.

Among the several first solos accomplished was that of Mrs. A. S. Butler, wife of the chairman of The de Havilland Aircraft Co., Ltd. Mrs. Butler's solo was made after only 6 hrs. 55 mins. instruction, a brilliant achievement! Mr. C. S. Napier, son of the chief of the Napier Engine Works, was another successful first soloist.

The Vicomte and Vicomtesse de Sibour left Stag Lane on September 14 in their D.H. Gipsy "Moth," on what promises to be a most successful world tour. A large assembly gathered to wish them *bon voyage*, amongst whom was Mr. Gordon Selfridge (father of the Vicomtesse), his son and another daughter, and Miss Fanny Ward, the "evergreen" actress.

Other notable visitors during the month have included Mr. Wilson, chief of the Civil Aviation Department of Canada, who flew to Cambridge in a school "Moth," and Admiral Mark Kerr, who also enjoyed a short trip "on the school."

The production of Gipsy engines has now settled down in earnest, and already many private deliveries have been made.

Henderson Flying School, Brooklands Aerodrome

REPORT for week ending September 20.—Total flying time, 45 hrs. 5 mins. Dual (with Col. Henderson):—Messrs. May, Vatcha, D'Eyncourt, Garthwaite, Elton, Kerr, Salah, Moursi, Groner, D'Eyncourt.

Dual (with Capt. Davis):—Hsiao, Vatcha, Mrs. Scott, Mrs. Monkton, Eltham, Kerr, Banks, Swann, Ducane, Garthwaite.

Solo:—Daniel, May, Hsiao, Bellville, Anderson, Oldmeadow, D'Eyncourt, Hill, Oliver, Stewart, Allen.

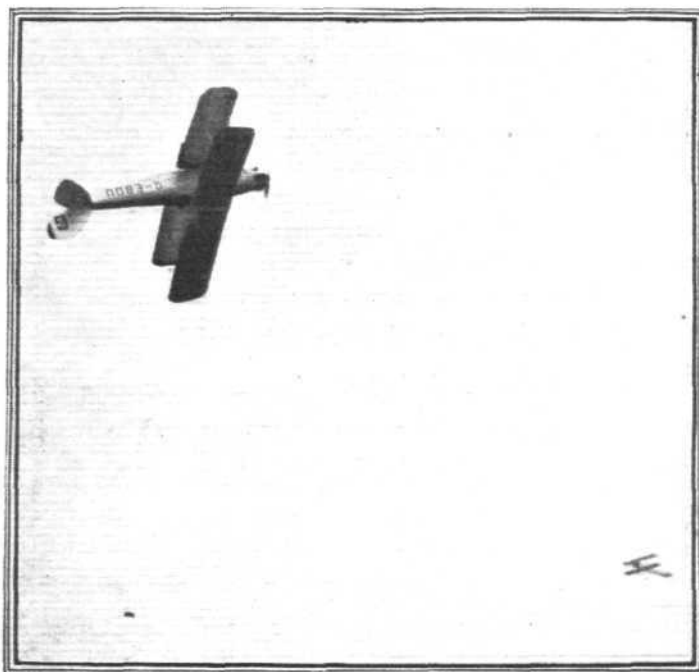
We very much regret the exceedingly sad accident to Miss Honor Wellby, who, owing to a moment of inadvertence on about her 30th solo flight, took off with her tail down and had a flat turn to the left and stalled at a low altitude. The Air Ministry examination of the machine has proved it to be in perfect order, and it was flown by our Ground Engineer and Lieut.-Col. Henderson before the accident. There seems to have been no question of engine failure. The machine had only been in service three weeks since complete overhaul for C. of A., and the engine had done 2 hrs. 30 mins. since top overhaul.

We wish to tender our sincerest sympathy to the parents.

NORTHAMPTON AIR PAGEANT

A Successful Début

THE Air Pageant organised by the new Northamptonshire Aero Club at their new aerodrome at Sywell, near Northampton, on September 29, was on a far larger scale than most people anticipated for this time of the year, and it was a most successful début, of which any club of greater experience in organising might easily have been proud. One believes



["FLIGHT" Photograph]

"STAR TURN" AT NORTHAMPTON: Flying Officer R. L. R. Atcherley in a conventional position (for him) on his back in Flight-Lieut. Soden's "Genet-Moth" "OU" during a roll. He "shot up" the large crowd at Sywell on Saturday in his usual way, diving low and clearing with climbing rolls.

that the club has not had so far that usual measure of outside support in the difficulties of formation and that the necessary outlay has come from the pockets of the directors. About £200 has already been spent on the new aerodrome alone.

Proceedings started at Sywell with an excellent luncheon

to visitors given by the club. Mr. W. Harris, chairman of the club, presided, and Air Vice-Marshal Sir Sefton Brancker was the chief guest. Sir Sefton did not arrive until late owing to bad weather around London delaying his departure by air. At 10 a.m. in the morning he was in Rotterdam. He flew to Croydon, then up to Sywell, where he arrived some time after 1 p.m. in the official D.H. "Moth X" (Cirrus Mk. II), G-EDCA, piloted by Flying-Officer Seeman.

The toast of "The Visitors" was proposed by Capt. A. F. G. Renton, who referred to the presence of the lady pilots, Miss W. Spooner, Miss S. O'Brien and Lady Heath, which drew appreciation. He also mentioned that Col. Bishop, V.C., had promised to attend but his doctors had forbidden him to, but he none the less promised every help in the future. Lady Heath replied, expressing thanks for the warm welcome received on landing and thanking the club for arranging a meeting at which pilots could gather at the end of the season.

She congratulated the organisers on their foresight and initiative and mentioned that some time ago the idea of a flying club was formulated, but it did not mature. The collection of machines on the ground was a hall-mark of a more successful effort. Light aeroplanes had given them something wonderful as well as teaching young men and women to fly. They showed the district something of aviation and taught in a safe form. Clubs were a national asset.

The Mayor of Northampton, Councillor J. Rogers, then rose to propose the success of the club. He said he was strongly of the opinion that the day was coming when the commercial value of such clubs would be very great. He did not want Northampton to repeat the mistake it made with regard to the railways, and lag behind, not recognising the value such a club might be in the near future. He said that they, the older folk, were timorous of going in the air, although they expected to go there very shortly. This was an age for young people, and he believed in giving them every facility.

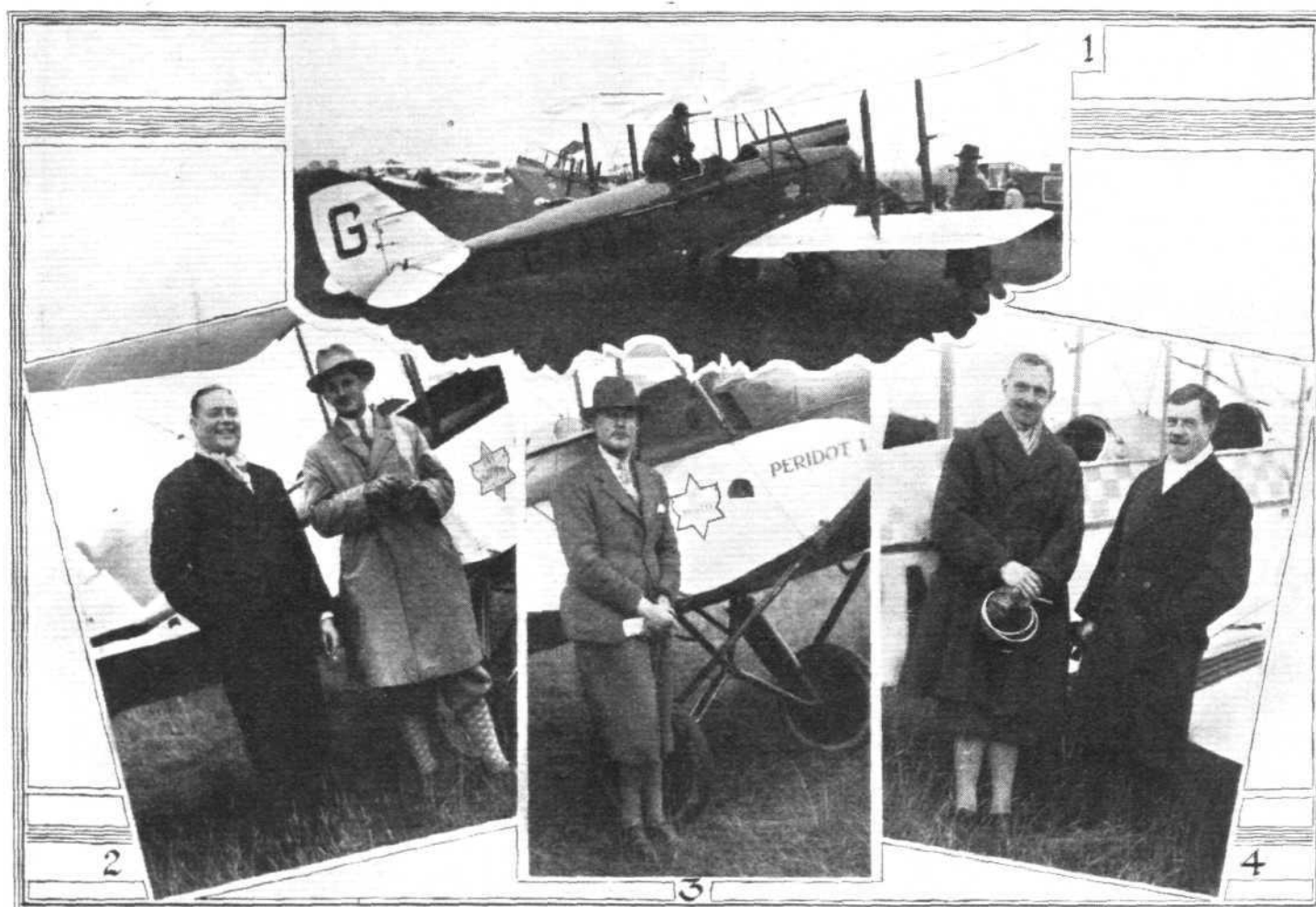
At this moment in the proceedings Sir Sefton Brancker arrived (the luncheon was held in a tent on the aerodrome). He immediately rose and said that he had hunted in Northamptonshire and could say that flying was safer than riding with the Pytchley. In his old age he thought that flying was a good sport. The Government was already assisting a number of clubs financially, but the Northampton Club had come in too late. The Treasury was only allowing a small sum during the next two years, and that had been allocated. So the club could not live on the dole.

They would have to pay for their club. They could come to the Air Ministry with all their troubles except financial ones. The Government was extremely keen on the establishment

Organisers and Supporters at Northampton: (left to right) The Hon. T. A. Verney Cave, Mr. G. Linnell, Sir Sefton Brancker, Capt. J. Addis, Mr. E. R. King and Mr. J. Linnell. The two latter organisers are private owners of an Austin "Whippet" and "Cirrus-Moth" respectively.

["FLIGHT" Photograph]





["FLIGHT" Photographs]

PRIVATE OWNERS AT SYWELL : (1) Miss W. Spooner, with her new "Gipsy-Moth" which she handles well. (2) (left to right) Mr. G. A. R. Malcolm and Mr. R. P. Cooper, both "Gipsy-Moth" owners. (3) Mr. A. C. M. Jackaman, of the London Aeroplane Club, owner of a "Cirrus-Moth." (4) Mr. A. F. Wallace (left) and Mr. P. W. Hoare, owners of a "Cirrus-Moth" and "Gipsy-Moth," respectively.

of aerodromes because until there were sufficient numbers flying would not attain its proper popularity. Our Empire was built up to-day on the air, and for the defence and development of the Empire they should become as good airmen as they had been seamen in the past.

Declaring the aerodrome open, Sir Sefton said a flying club was a real national asset. Northampton Aerodrome was one of the first started by any city in the country. They wanted every city to have an aerodrome, just as they had a

railway station, because it would soon be absolutely necessary. He concluded by wishing the club every success in the future.

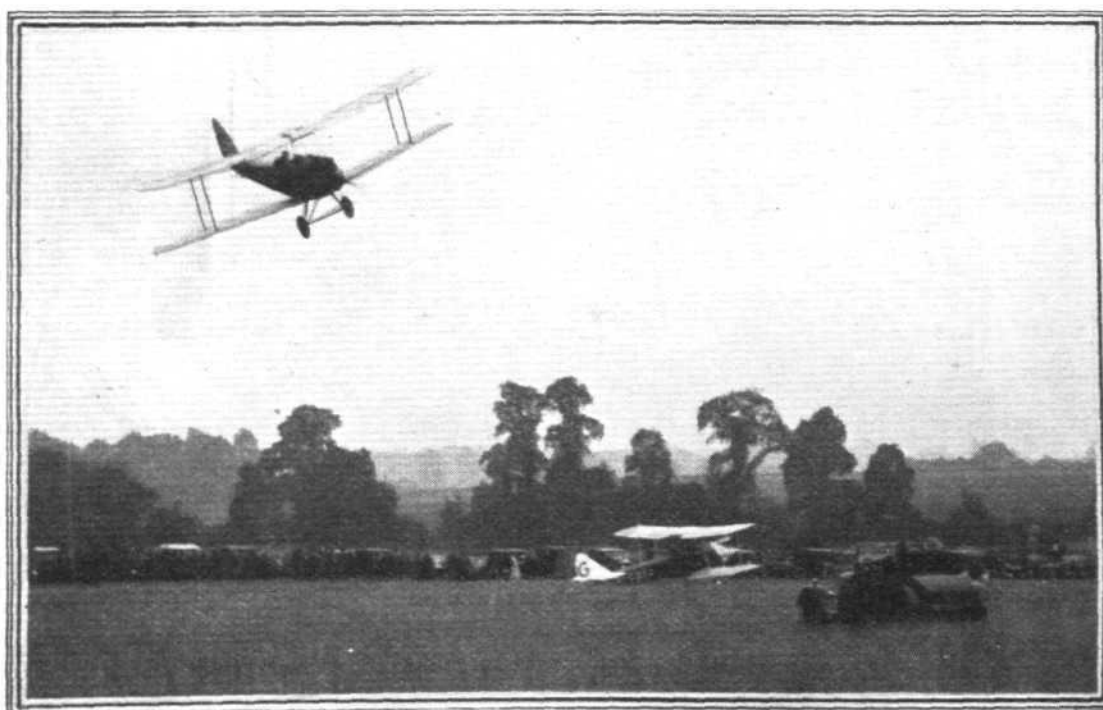
The luncheon was attended by, amongst others, Lord and Lady Erskine, Lord Bray, the Mayor of Higham Ferrers (Councillor Frank Walker, J.P.), the ex-Mayor of Northampton (Councillor J. Peach), the Mayor-elect (Councillor A. E. Ray, J.P.), Maj. W. Hughes, the Hon. T. Verney Cave, Mr. T. Illingworth, Mr. J. Jeyes, Councillor T. Wareing,

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‡ **Bombing Event at Northampton:**
 ‡ Capt. H. Broad
 ‡ diving to attack the
 ‡ elusive car with
 ‡ bombs (bags of
 ‡ flour) in the
 ‡ "Gipsy-Moth";
 ‡ an interesting
 ‡ event in which
 ‡ many pilots tried
 ‡ their hand. The
 ‡ continuance of joy-
 ‡ riding slightly
 ‡ interfered with
 ‡ movements. Capt.
 ‡ E. W. Percival, on
 ‡ his Avro "Avian,"
 ‡ with which he
 ‡ gained second
 ‡ place at the French
 ‡ Light Plane Trials,
 ‡ planted some
 ‡ excellent shots.

‡ ["FLIGHT" Photograph]

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Mr. Harold Brown, Mr. F. Harrison, Mr. A. H. Gooderson, Dr. W. A. Henshaw, Dr. W. Smartt, and Capt. W. G. Williams.

Flying Programme

After luncheon the flying events commenced, in which the organising was worthy of experts. There was hardly a moment's delay between events. In fact, some machines seemed to be in the air waiting to compete before the previous event had definitely finished. That is the way to keep the crowd up to pitch. The crowd, by the way, ran to 20,000, according to one report. That figure was particularly significant as a sign of the future local interest in flying, because the weather was of that tricky sort which compels one to feel sure it will rain if one attends and not rain if one refrains. All the morning the clouds were extremely low from London, but during the afternoon they showed a merciful tendency to lift, and personally one only noticed Flying-Officer Atcherley on the Genet-Moth ever disappear through the filmy layers.

There were loud speakers for the guidance of the crowd, and also joy-riding machines if any wished to try their luck. Col. Henderson was very busy with his Avros, and so was Miss O'Brien with her Cirrus-Moth. The number of machines that arrived was quite a pleasant surprise. There was one Blackburn "Bluebird" from the Suffolk Club flown up by the genial Dr. Sleight, and all the others, of the total of approximately 27, were Avro "Avians" and D.H. "Moths" (with Cirrus or Gipsy engines).

Grand Parade.—The first event was the Grand Parade, in which all machines taxied past the enclosure in a long line and then took off, circled, tore past rather low, and landed. When all were aloft they filled the local sky.

Then came a demonstration of the Handley Page slotted wing on a Gipsy-Moth piloted by Capt. Cordes, the test pilot, who is an expert at this sort of show. He floated about at stalling speed at a low altitude, did sharp flat turns, banked turns at stalling speed, and anything he liked.

The next item was the Pageant of Progress, deemed to reveal the evolution in means of conveyance throughout the ages. First came the Ancient Briton on a vehicle, which, if historically accurate, suggests the A.B. had a perverted mentality, for instead of it carrying him he carried it, and in a most uncomfortable way. Then wobbled a "Penny-Farthing" bicycle on which our grandfathers used to balance and take the air. An ancient car and a motor-cycle complete with driver in a crash helmet and full-proof against the weather followed, then came a racing car, and finally the Avro "Avian" piloted by Lady Heath. There was a bunch of donkeys trotting about at the same time, "piloted" by Miss W. Spooner, Capt. H. Broad, Mr. St. John Plevins, Flight-Lieut. Le Poer Trench and others. Apparently, they were getting their hand in for the "All Forms of Transport" event later.



"FLIGHT" Photograph

Capt. H. A. Brown (right), test pilot, and Mr. Dobson, Works Manager, both of Messrs. A. V. Roe and Company, who attended and took part at the Sywell Air Pageant.

Bombing.—When the educational item was absorbed there were bombing attacks to thrill the crowd. Flight-Lieut. Rose and Capt. H. Broad went up on the Cirrus-Moth and Gipsy-Moth respectively, and did their utmost with bags of flour on an elusive car without getting a hit. Flight-Lieut. Rose got in a very close shot. Other pilots followed, including Capt. Percival on his Avro "Avian," and Lady Heath on her machine. The former also proved expert, handling his machine with attractive skill. According to one's attention no hit was made. Trench helmets and barbed wire adopted by the defence were not necessary.

The joy-riding machines were still taking off with their human (paying?) loads and landing during these bombing attacks restricted some of the pilots. One pilot carried a bomber whose earnest efforts were interestingly visible.



["FLIGHT" Photograph

PAGEANT OF PROGRESS: The leader is a "cave-man" with a "cave-man's" alleged form of transport, of which one doubts the historical accuracy. He is followed by the "penny-farthing" bicycle, motor-cycle, racing car and Avro "Avian" piloted by Lady Heath.

Col. Henderson then temporarily adjourned his joy-riding to take up a wing-walking performer, who, a distinct figure in white overalls, threaded his way to the wing tips and back as the Avro flew diagonally over the aerodrome.

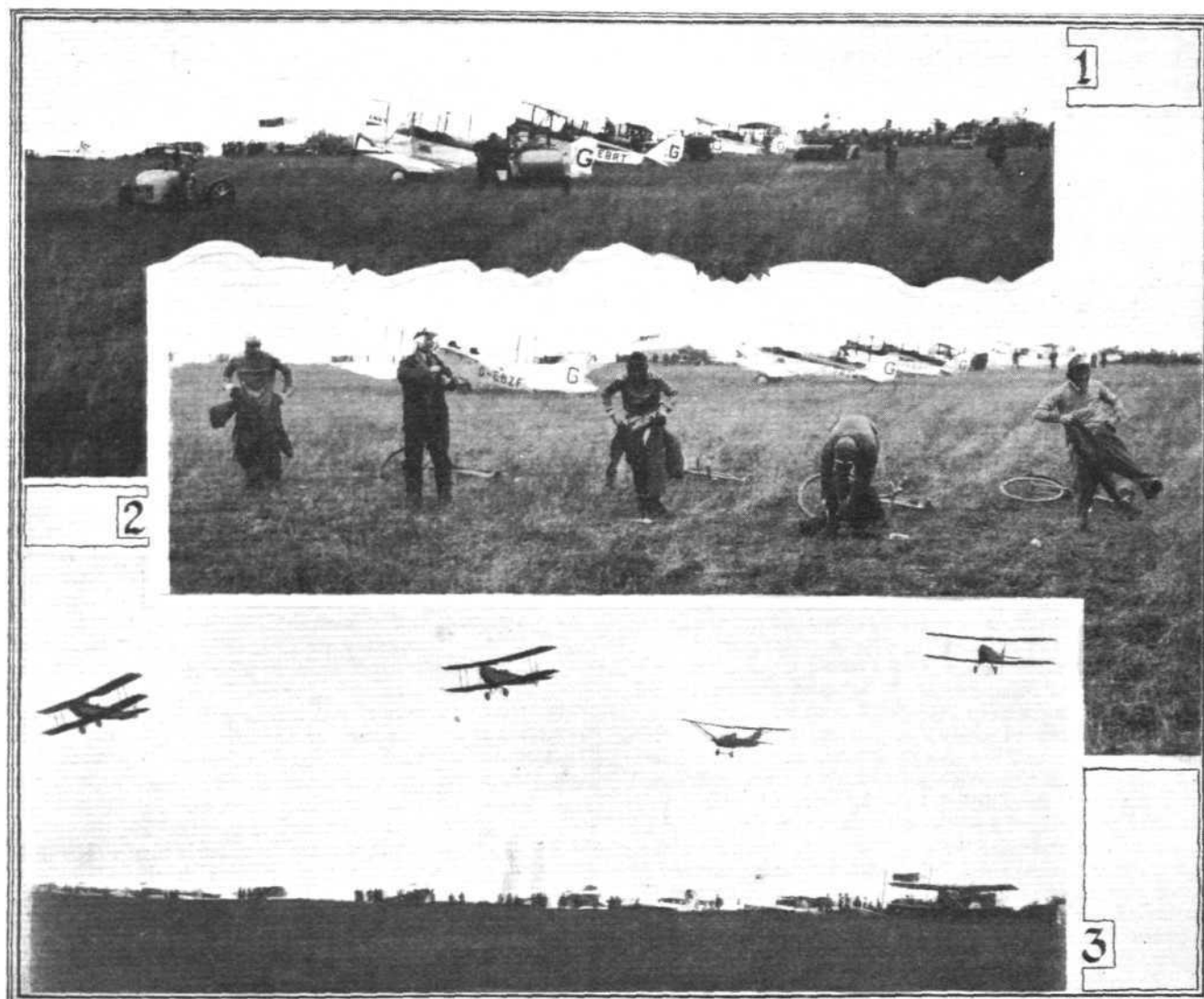
Stunting.—Flying-Officer R. L. Atcherley next performed his usual stunts on Flight-Lieut. O. Soden's Genet-Moth "OU." He repeatedly got down below the line of sight, suddenly appeared flying full out, climbed and performed two rolls over the middle of the aerodrome. He also flew his usual length inverted, and turned in the course of it, and looped off the deck. He landed, slewing the tail to port and starboard, and touched with a three-point landing nearer to the line of machines than most pilots dare essay.

being conceded Trench. Lady Heath finished at great pace on their tails.

Heat II.—In the next heat the competitors included Miss W. Spooner on her Gipsy-Moth, Capt. Broad and Mr. Malcolm on Gipsy-Moths. Miss Spooner got through the obstacles first thanks partly to emptying her bottle of beer on the ground instead of in the place nature made for it. Capt. Broad overtook her, however, in the air.

Capt. H. Broad gave an exhibition after the former item of crazy flying for about 15 minutes, rolling, looping and diving, and giving the crowd ecstasies.

The final event was a Balloon Bursting Competition. Miss W. Spooner was a competitor, and so was Mr. Simmonds



[“FLIGHT” Photographs]

NORTHAMPTON AIR PAGEANT : These are views of the “All Forms of Transport” event which caused so much merriment. (1) Competing pilots being raced in cars to their starting machines after struggling through the various difficulties, such as drinking a bottle of beer. (2) Sliding into overalls (left to right) Capt. Cordes, Mr. N. Jones, Lady Heath, Mr. A. Jackaman and Flight-Lieut. Le Poer Trench. (3) A “close finish” after flying the circuit.

Another D.H. “Moth” mysteriously followed Atcherley round at a respectable distance. It was for the purpose of taking photographs!

“All Forms of Transport” made great fun for the crowd and the competitors, who had to run 50 yards, cycle 50 yards, don overalls, ride donkeys 50 yards, drink a bottle of beer each, ride in a car to their waiting and revving machines, take off and fly a short course round the aerodrome.

In the first heat there were Lady Heath on an Avro “Avian”; Flight-Lieut. Le Poer Trench on the Halton monoplane, Mr. Norman Jones on his Cirrus-Moth, Mr. Jackaman on his Cirrus-Moth, and Capt. Cordes on a Gipsy-Moth. The crowd seemed particularly delighted to see Lady Heath tackle her bottle of beer! Flight-Lieut. Le Poer Trench was first up the field in the car, but, except for Lady Heath, the machines practically took off together and there was a most interesting “close finish,” “victory”

on his Simmonds “Spartan,” who was reported to have crashed five out of six balloons.

Visitors

Sir Sefton Brancker left the aerodrome in Cirrus-Moth G-EDCA at the end. Many pilots remained for the next day, the machines being covered for the night, and joy-riding took place. New members of the club received a free flight, and others paid 5s.

On Saturday night the club continued its generous entertainment with a dinner at the Grand Hotel to the visiting pilots, and a jovial evening was spent.

All thanks were due to the energetic organising of Mr. W. Harris, Capt. W. G. Williams, the Hon. Verney Cave, Mr. T. Illingworth, Maj. W. Hughes, Mr. E. Harrison, Mr. C. M. Newton, Mr. J. Jeyes, Mr. J. Linnell and Mr. A. G. Linnell, as well as many others whose names are not at hand.

The flying visitors included Miss W. Spooner, Mr. A. F.

Wallace, Mr. P. Hoare, Mr. G. A. Worth, Mr. O. E. Simmonds, Mr. A. C. M. Jackaman, Mr. G. A. R. Malcolm, Capt. H. Broad, Mr. R. P. Cooper, Mr. Tapper, Capt. H. A. Brown and Mr. Dobson, Capt. Cordes, Miss O'Brien, Capt. Lines, Lady Heath, Mr. Norman Jones, Flying-Officer R. I. Atcherley and Flight-Lieut. O. Soden, Mr. Matthews (instructor of the London Aeroplane Club), Mr. N. Hulbert, Dr. Sleight, Flight-Lieut. T. Rose (instructor of the Midland Club), Capt. E. W. Percival, Flight-Lieut. Le Poer Trench, Mr. St. John Plevins, Mr. Little, and Capt. Lamplugh, Mr. Cazalet, Mr. G. Linnell and Mr. J.

Linnell of the Northamptonshire Club had their D.H. "Moth" there and another member, Mr. E. R. King, his Austin "Whippet."

Doubtful weather no doubt accounted for the absence of many intending visitors. Amongst those who expected to attend were the Duchess of Bedford, Sir Pyers G. J. Mostyn, Lord Ossulston, Capt. S. Burt, Mr. L. L. Irvin, Mr. Art Fowler, Mr. I. McClure, Mr. Nigel Norman (who is touring Poland), Mr. F. A. I. Muntz and Capt. A. S. White. It was stated that the R.A.F. had promised to send 14 machines.

THE BERLIN AERO SHOW (I.L.A.)

Great Britain Well Represented

IN spite of the fact that, as a result of the refusal of the Treasury to grant a relatively small sum towards the expense, the British Aircraft Industry is not exhibiting *en bloc* via the Society of British Aircraft Constructors, British aviation promises to be well represented at the forthcoming International Aero Exhibition (I.L.A.) which is being held in Berlin from October 7 to October 28. That is to say, several British aircraft firms are exhibiting complete aeroplanes, the main aero engine firms are exhibiting engines, and quite a large number of firms are showing accessories, instruments, equipment, etc. Thus, while the British Section at I.L.A. might have been larger, it will be a good deal more representative than has been the case at several international exhibitions during the last few years.

For the fact that Great Britain will be so well represented at Berlin we have in a large measure to thank Mr. O. G. Karlowa, the German representative in London of the *Reichsverband der Deutschen Luftfahrt Industrie* (the German equivalent of our S.B.A.C.), who has been tireless in his endeavours to persuade British firms to exhibit, and who has left no stone unturned to see that all branches of British air activity should be represented. Herr Tetens, chairman of the *Reichsverband*, made a wise choice when he appointed Mr. Karlowa to look after the British Section.

It is not proposed here to deal in detail with the various British exhibits, as we hope to refer to them next week. In the meantime, however, a brief summary of what Great Britain will have to show at Berlin may be of interest.

The Blackburn Aeroplane and Motor Co., Ltd., will exhibit one of their "Bluebird III" light aeroplanes, fitted with the Armstrong-Siddeley "Genet" engine. One of the characteristic features of this machine is the side-by-side arrangement of the seating accommodation. In addition there will be found on the Blackburn stand a Duralumin seaplane float for the "Bluebird," a model of the "Bluebird" with interchangeable land and float undercarriage, a model of the "Lincock" biplane with "Lynx" engine, and a model of a suggested design for a large three-engined ("Jupiter") monoplane flying-boat. There will also be a number of photographs of various Blackburn aircraft.

The De Havilland Aircraft Company will be represented by their latest type of "Gipsy-Moth," as regards complete aircraft. They will also have on view a float undercarriage for the "Moth," a ski undercarriage, a selection of their aerodrome equipment, safety harness, etc., and a Fairey-Reed metal airscrew. The "Gipsy" engine will not be shown apart from that mounted in the "Moth." On the de Havilland stand there will also be an "Eagle" aerial camera, exhibited by the Williamson Manufacturing Co., Ltd.

A. V. Roe & Co., Ltd., are showing two complete "Avian" light aeroplanes, one of which is fitted with the

"Cirrus II" engine, and the other with the Armstrong-Siddeley "Genet." Thus, visitors to the Berlin show will have an opportunity to compare the two types.

The list of British aero engines to be exhibited at Berlin is a very complete one, and will include examples of nearly all the best known British types, ranging from 70 b.h.p. to about 500 b.h.p.

A.D.C. Aircraft, Ltd., will show three types of engine: the "Nimbus," the "Cirrus III" and the "Cirrus II," all of which are well known and well tried types.

Armstrong-Siddeley Motors, Ltd., will exhibit their four familiar types: The "Jaguar," the "Lynx," the "Mongoose" and the "Genet," covering a wide range of powers.

The Bristol Aeroplane Co., Ltd., will be represented by the same range of engines as exhibited at the Paris show in June, *i.e.*, several versions of the famous "Jupiter," and one of the new "Titan" engines.

D. Napier and Son, Ltd., confine themselves to a single-type, but this is the very latest, *i.e.*, the "Lion XI," which may be said to be the service version of the racing engine fitted in the Schneider Trophy machines, etc., and develops an amazing amount of power for its weight.

The famous firm of **Rolls-Royce, Ltd.**, will show their latest type of service engine, the F. XII, which is a high-power water-cooled Vee engine of very small frontal area.

Although not having a stand of their own, **A.B.C. Motors, Ltd.**, will be represented by one of the new "Hornet" flat-twin engines, which will be shown on the stand of the firm's German representative.

Two more British aircraft firms will have stands in the British section, although not showing complete machines. The Gloster Aircraft Company will exhibit one of the new Gloster-Hele Shaw variable pitch propellers which has now been tested in flight, and has been developed to the point where it can be regarded as a really practical proposition.

Handley Page, Ltd., unable to exhibit a complete aircraft, will show a "Moth" wing fitted with the Handley Page automatic wing tip slot, while a model placed in front of an electric fan will be used to demonstrate the operation of the slot.

The Air Ministry and the Royal Aeronautical Society will be represented by models, historical documents and prints, etc., and Imperial Airways, Limited, will have an exhibit, the exact nature of which is not known to us at the moment.

British instruments will be shown by Hughes and Sons and Smith and Sons, and parachutes by the Irving and British Russell firms. Palmer Tyre, Ltd., will exhibit aero wheels, and our famous Wakefield firm will also be represented.

Altogether it can be said that the British section at Berlin will be a very representative one.

R.A.E.S. AND INST.AE.E.

Official Notice

Lecture Programme.—The following is a list of the lectures at present arranged in the first half of the programme for the session 1928-29. All lectures will be held in the theatre of the Royal Society of Arts, 18, John Street, Adelphi, W.C.2, at 6.30 p.m., except the joint meeting with the Institution of Automobile Engineers, which will take place at 7.45 p.m.

- Oct. 4. Mr. J. D. North, F.R.Ae.S., M.I.Ae.E., The Technical Development of the Aeroplane.
- " 18. Mr. H. Sutton, M.Sc., Light Alloys and their use in Aircraft. (With special reference to Corrosion Problems.)
- Nov. 1. Mr. W. D. Douglas, A.F.R.Ae.S., and Miss C. B. Pettifor. The Testing of Adhesives for Timber.
- " 8. Wing Commander T. R. Cave-Browne-Cave, C.B.E., F.R.Ae.S., Machinery Installation of R. 101.
- " 15. Mr. R. J. Penn, A.M.I.Mech.E., Aeroplane Engines in Flight. (With special reference to Carburation.) (Joint Meeting with Institution of Automobile Engineers.)
- " 22. Major T. M. Barlow, F.R.Ae.S., Weight of Aircraft. (With special reference to its effect on size.)
- " 29. Mr. F. Sigris, A.F.R.Ae.S., Production Problems.
- Dec. 6. Capt. A. P. Thurston, D.Sc., F.R.Ae.S., M.I.Ae.E., Control of Aeroplanes by Alulas.

J. LAURENCE PRITCHARD, Secretary.

PERSONALS

Married

FLY-LIEUT. FINDLAY WILLARD SINCLAIR, D.F.C., R.A.F., son of Mr. and Mrs. F. D. Sinclair, of Calgary, Canada, was married, on September 26, at St. Martin-in-the-Fields, to DORA, only daughter of Mr. and Mrs. WASHINGTON JEWELL, of Barnet, Herts.

To be Married

A marriage has been arranged, and will shortly take place, between GEORGE DOUGLAS GREEN, R.A.F., only son of the late Dr. and Mrs. G. R. Green, of Ripon and Portmadoc, and DOROTHY MARY, only daughter of Col. J. P. C. HENNESSY, C.M.G., I.A. (ret.), and Mrs. Katie HENNESSY, of Keyston, Huntingdonshire.

The marriage arranged between PHILIP JONES, R.A.F., and NOWELLE, elder daughter of Mr. and Mrs. G. M. BILLINGS, of Victoria, B.C., late of Shanghai, will take place in Holy Rood, Crofton, on Saturday, October 6, at 2.30 p.m.

The marriage arranged between VISCOUNT KNOLLYS, D.F.C., and MARGARET, daughter of Sir STUART and LADY COATS, of Ballathie, Stanley, Perthshire, will take place at St. John's Church, Perth, on October 11, at 12.30 p.m.

Deaths

GOODFELLOW.—On September 21, at Sidmouth, following an operation, MARTYN BOSTON, aged 49, beloved son of Mr. and Mrs. Alan GOODFELLOW, of Sharston Manor, Northenden, Cheshire.

AIRSIPS

FROM THE FOUR WINDS

L.Z.127 Visits England

PILOTED by Dr. Eckener the "Graf Zeppelin," L.Z.127, paid a visit to England on October 2—the first "Zep raid" since 1918. The airship left Friedrichshafen at 7 a.m. with the intention of flying over Berlin. Shortly after, however, unfavourable weather was encountered, and the course was diverted westward towards Holland. At 6.30 p.m. the airship passed over Rotterdam and then made for the English coast. She was sighted at Lowestoft at 9.5 p.m., flying low, and shortly after passed over Yarmouth. The airship then flew in a north-easterly direction, apparently making for home. Wireless messages were picked up from the airship stating that it expected to be over Berlin at 8 a.m. on October 3. It is reported that the new "Blue gas" fuel was being used.

London-Cape Town Flight

CAPT. W. L. HOPE, the air taxi pilot, who is flying from London to Cape Town, reached Khartum on October 1. He has been delayed by a touch of sunstroke.

Touring to South Africa

CAPT. HALSE, who is also flying from London to South Africa with his wife in his new Gipsy-Moth, is down at Atbara with engine trouble.

The Flying Baron

BARON VON HUNEFELD, the German Atlantic airman, who is flying from Berlin to Tokio in the Junkers "Europa" monoplane and was held up in Persia for a short time, left Calcutta for his next destination, Canton, at dawn on October 1.

Return Tasman Sea Flight

THE "Southern Cross," the aeroplane in which Capt. Kingsford-Smith and Mr. Ulm flew recently from Australia to New Zealand, went to Blenheim on September 28 in readiness for the return flight across the Tasman Sea. The date of this will depend on the weather, as adverse winds are liable to be encountered at this season.

Captured Airmen Released

THE two French airmen, M. Vidal and his mechanic, who were captured by the Moors when their machine made a forced landing in the Sahara recently, have been set free and sent back to Tisint. They reported that they were extremely well treated.

Atlantic Flight by Light 'Plane

LIEUT.-COM. H. C. MACDONALD has reached St. John's, Newfoundland, and his Gipsy-Moth is being prepared for his attempt upon the Atlantic to Ireland.

The Byrd Expedition

COMMANDER BYRD left Boston on October 1 for San Pedro, California, where he will board the whaler *Larsen* for New Zealand. The four vessels of his Antarctic expedition will meet at Dunedin, and will proceed together to the base at the Bay of Whales. Before leaving, Commander Byrd issued a statement thanking all those who had made the expedition possible by gifts of money, materials, and time.

Upside Down Record

A YOUNG Swiss airman, Robert Clardon, has achieved what is claimed to be a new world's record by flying upside down for 19 mins. 6 secs. He is described as being more dead than alive when taken out of the aeroplane.

U.S. Navy Airships

THE contract for the construction of two dirigibles for the navy, each to be 6,500,000 cub. ft. in volume, will be negotiated with the Goodyear Zeppelin Company of Akron (Ohio). The company's bid for the design and construction of the dirigibles was \$7,950,000 (£1,590,000).

Canadian Air Mails

CANADIAN air mail services are making good progress. Marking the inception of a regular passenger and express service between Winnipeg and Edmonton, via Regina and Calgary, a Western Canada Airways' de Havilland 61 biplane arrived at Edmonton from Winnipeg on September 13. The plane carried several passengers, including the Hon. John Bracken, Premier of Manitoba, together with the express packages from Eastern Canada shipped via the Canadian Pacific Railway Express and transferred to the plane at Winnipeg. Montreal will be the central port for air mail and passenger services in Eastern Canada in the coming winter with aeroplane lines radiating east, south, and west. On October 1 a daily air-mail service between Montreal and

Albany, N.Y. State, was inaugurated. Finally, the Canadian Post Office Department has announced the issue of a new 5 cent. air-mail stamp, which was on sale at all Canadian city post offices on September 21.

African Air Mail

A SERVICE of air mail dispatches daily instead of tri-weekly from Beira to all African destinations served through Salisbury, Rhodesia, began on October 1.

Belfast-Liverpool Service

THE Short "Calcutta" flying-boat service between Belfast and Liverpool which was run last week is being continued until October 6. Mails will be despatched for either way every day.

America Wants Avro "Avians"

AIR Associates Inc., New York, have been appointed sole distributors for the Avro "Avian" light aeroplane in the United States of America and possessions. Fifty "Avians" have already been ordered, and that is the minimum quantity the distributors will take during each six months. Deliveries will commence immediately and continue at the rate of two per week. It is thought that this is the largest single order for light aeroplanes ever placed. It means that the White Star and Cunard Lines will carry between them 1,200 freight tons of aircraft to America during the next six months.

British Fokker Machines

It has been announced by A. V. Roe and Co., the aircraft constructors, that they have entered into an agreement with the Fokker Aircraft Co. of Holland for the manufacture and sale in Great Britain, the Irish Free State, India, Australia, New Zealand, S. Africa, of Fokker monoplanes fitted with Armstrong-Siddley "Lynx" 200 h.p. engines.

Air Speed Record

ON October 1, Flight-Lieut. D'Arcy Greig made his first trial flight on a Supermarine-Napier seaplane preliminary to his attempt upon the speed record, which now stands at 318½ m.p.h., made by Maj. di Bernardi, the Italian pilot. The test lasted for half-an-hour, and he is reported to have attained a speed of 300 m.p.h. The record will be attempted on another Supermarine-Napier seaplane.

British Duration Attempt

OWING to the injuries received by Sqdn.-Ldr. Noakes in a recent accident, it has been necessary to appoint another pilot to fly the Fairey monoplane which has been specially designed in the hope of securing for Great Britain the record for a flight of the longest duration on one load of fuel. Before the engine to be used is definitely settled, test flights are to be made with at least two different types of engines, in order to find out which is capable of giving the best duration for consumption figure. The attempt on the record will not take place for some considerable time. The pilot who in all probability will attempt the duration flight will be Sqdn.-Ldr. A. G. Jones-Williams, M.C., who commands the 23rd Squadron. This officer was born in British Columbia and educated at Haileybury and Sandhurst. He entered the Welch Regiment, but was seconded to the Royal Flying Corps. He served with distinction in the War, and was awarded the Military Cross with bar.

Land's End—Berlin Experiment

MR. CLARENCE CHAMBERLIN, the pilot to Mr. Levine in the Transatlantic flight from America to Germany, sailed from New York on September 29 with an amphibian plane, in which he hopes to fly from Land's End to Berlin.

Brazil's Ambition

A BILL has been introduced in the Chamber of the State of São Paulo, Brazil, authorizing the Government of the State to organize and finance a flight from Brazil to Europe.

Record on Imperial Airways

NEARLY 4,000 passengers flew across the Channel on Imperial Airways machines during September—a record.

R.A.F. Search for Lost Shooting Party

TWELVE R.A.F. machines have been searching for a shooting party which left Cairo on September 29 and have not since been heard of. They covered an 80-mile radius from the point where the party entered the desert.

Death of Arctic Airman's Mother

A REUTER message from Sydney states that Mrs. Wilkins, the mother of Sir Hubert Wilkins, the Arctic explorer, has died at the age of 82.

THE ROYAL AIR FORCE

London Gazette, September 25, 1928.

General Duties Branch

The foll. are granted short-service comms. as Pilot Officers on probation with effect from and with seniority (Sept. 14):—A. G. Adnams; A. F. P. Anning (Lt., 69th Bde., R. A., T. A.); A. R. Armstrong; J. F. Ballin; A. C. Baber; J. E. Beynon (Lt., Essex Regt., T.A.); B. A. Blythe; A. L. Brain; C. M. D. Chambers; C. M. Champion de Crespigny; G. H. Clarke; H. R. Collins; R. G. Cruikshank; E. W. Downing; H. A. Fenton; K. R. Garle; L. I. Gibson; I. C. Guest; F. N. Hemphill; H. R. Hughes-Hallett; E. Ions; A. E. Louks; D. S. McDougall; F. A. McNeill; C. C. C. Manson; G. O. St. J. Morris; M. P. O'Reilly; K. W. Pell (2nd Lt., R.W. Kent Regt., T.A.); A. F. Powell; G. C. Shirlcliffe; C. Ray; F. Read; R. A. R. Robinson; J. D. Roden; L. P. Rowley; F. W. H. Russell; D. F. Satchwell; J. S. Shakespeare; V. C. F. Streatfeild; L. P. Thomas.

Pilot Officer G. Selk is promoted to the rank of Flying Officer (Oct. 26). The following Pilot Officers on probation are confirmed in rank:—C. K. Turner (Aug. 31); J. C. K. Rogers; J. E. Markby; H. G. Hicks; J. C. B. Tunling; J. B. Veal; A. D. Bennett; J. W. Smith; P. H. Smith; W. D. J. Michie; H. L. Piper; C. H. Appleton; R. W. K. Stevens; L. V. Bennett; J. A. Green-shields; C. L. Myers; M. C. Collins; C. A. Pearson; P. F. Luxton; D. M. Harrison; A. Le R. S. Upton (Sept. 2).

Flight Lt. F. Carpenter is placed on retired list at his own request (Sept. 22). The following are transferred to the Reserve:—CLASS A.—Flying Officer C. B. Wilson (Sept. 18); Flying Officer L. H. Ross (Sept. 15) (substituted for Gazette, Sept. 18). CLASS C.—Flight-Lt. R. E. H. Allen (Sept. 12).

The short service comms. of the following Pilot Officers on probation are terminated on cessation of duty:—C. R. Shillingford (Sept. 15); G. R. Chameroy (Sept. 25); P. B. T. Rowland (Sept. 26). Lt. E. B. Canduff, R.N., Flying Officer, R.A.F., ceases to be attached on return to Naval duty (July 28).

Memorandum

The permission granted to Sec. Lt. A. C. J. Payne, M.M., to retain his rank is withdrawn on his enlistment in the Supplementary Reserve (Aug. 17).

RESERVE OF AIR FORCE OFFICERS

General Duties Branch

The following Pilot Officers are promoted to rank of Flying Officer:—O. F. Maclaren, L. R. Stooke (Sept. 21); B. J. Apthorpe Webb (Sept. 22). Pilot Officer on probation E. Rea is confirmed in rank (Aug. 11). Flying Officer D. P. Cameron, M.B.E., is transferred from Class C to Class A. (Sept. 10); Pilot Officer J. H. M. Smith is transferred from Class AA. to Class C. (Sept. 22).

The following Flying Officers relinquish their comms. on completion of service:—G. R. Schooling (Sept. 16); P. Colbeck, M.B.E. (Sept. 17). Flying Officer E. R. Stafford relinquishes his commn. on completion of service, and is permitted to retain his rank (Sept. 2). Pilot Officer E. J. Brighton resigns his commn. on appointment to a short service commn. (Aug. 23); the commission of Pilot Officer on probation L. L. J. Davies is terminated on cessation of duty (Sept. 1).

ROYAL AIR FORCE INTELLIGENCE

Appointments.—The following appointments in the Royal Air Force are notified:—

General Duties Branch

Flight Lieutenants: J. S. Nichol, to Elec. and Wireless Sch., Flowerdown, 17.9.28. A. H. J. Howlett, to No. 36 Sqdn., Donibristle, 6.9.28. G. H. Martingell, A.F.C., to Central Flying School, Wittering, 2.10.28. E. C. Delamain, M.C., to No. 11 Sqdn., Netheravon, 5.10.28. F. H. Laurence, M.C., to No. 480 Flight, Calshot, 15.8.28. G. E. Ranson, to R.A.F. Base, Calshot, 1.10.28. R. Harrison, D.F.C., to No. 2 Flying Training School, Digby, 11.10.28. J. Dumiuy, to Marine Aircraft Experimental Estab., Felixstowe, 18.9.28. R. E. Meek, to H.M.S. *Furious*, 1.10.28. J. D. S. Denholm, to H.Q., Air Defence of Great Britain, Uxbridge, 1.10.28. J. Marsden, to R.A.F. Depot, Uxbridge, 1.10.28. V. B. Bennett, to No. 602 Sqdn., Rentrew, 1.10.28.

Flying Officers: A. H. Berry, D.S.M., to R.A.F. Base, Gosport, 10.10.28. A. H. M. Weir, to R.A.F. Training Base, Leuchars, 6.9.28. S. H. C. Gray, to No. 20 Sqdn., India, 24.8.28. R. A. Barnett, to No. 28 Sqdn., India, 29.8.28. A. E. Groom, D.S.M., to Aeroplane and Armament Experimental Estab., Martlesham Heath, 8.10.28. H. E. E. Weblin, to Marine Aircraft Experimental Estab., Felixstowe, 18.9.28. B. C. Mason, to No. 603 Sqdn., Turnhouse, 24.9.28.

Pilot Officers: W. H. Hutton and A. W. Hunt, to School of Naval Co-operation, *Lee-on-Solent*, 10.9.28. The undermentioned are posted to R.A.F. Depot, Uxbridge, on appointment to Short-Service Comms. (on probation), with effect from 14.9.28: A. G. Adnams, A. F. P. Anning, A. R. Armstrong, A. C. Baber, J. F. Ballin, J. E. Benyon, B. A. Blythe, A. L. Brain, C. M. D. Chambers, C. M. Champion de Crespigny, G. H. Clarke, H. R. Collins, R. G. Cruikshank, E. W. Downing, H. A. Fenton, K. R. Garle, L. I. Gibson, I. C. Guest, F. N. Hemphill, H. R. Hughes-Hallett, E. Ions, A. E. Louks, D. S. McDougall, F. A. McNeill, C. C. C. Manson, G. O. St. J. Morris, M. P. O'Reilly, K. W. Pell, A. F. Powell, C. Ray, F. Read, R. A. R. Robinson, J. D. Roden, L. P. Rowley, F. W. H. Russell, D. F. Satchwell, J. S. Shakespeare, G. C. Shirlcliffe, V. C. F. Streatfeild, and L. P. Thomas.

Stores Branch

Flying Officer A. J. Redman, D.F.C., to C. and M. Party, Cattewater, 20.7.28.

Chaplains Branch

Rev. J. F. Cox, M.C., B.A., to R.A.F. Depot, Middle East, 8.9.28. Rev. W. P. Hughes, to No. 4 Flying Training Sch., Middle East, 7.9.28.

AIR MINISTRY NOTICES

Baghdad: Ground Markings

In preparation for air survey work in the vicinity of Baghdad a number of white circular ground marks have been made in various localities within an area extending 40 miles N. and 20 miles S. of Baghdad, and approximately 20 miles on each side of the River Tigris.

These marks vary in shape and size, but mainly comprise a whitewashed cairn 5 ft. in diameter, surrounded by a whitewashed circle 2 ft. wide and 15 to 30 ft. in diameter. The marks are placed at distances varying from a third to a half of a mile apart.

Pilots of aircraft visiting or passing over Iraq are warned of the existence of these marks, which might be mistaken for landing ground markings, (No. 68 of 1928.)

Customs Regulations

Pilots are reminded that in accordance with the Customs Regulations laid down in Schedule VIII of the Air Navigation (Consolidation) Order, 1923, an aircraft entering Great Britain and Northern Ireland shall not land in Great Britain and Northern Ireland for the first time on any journey except at a Customs aerodrome, and an aircraft shall not fly to a place outside Great Britain and Northern Ireland unless its place of final departure is a Customs aerodrome.

Pilots are warned of the serious consequences which may eventuate from failure to comply with these Regulations, and in this connection attention is called to the penalties set out in Art. 27 of the Order. (No. 69 of 1928.)

Pilotage of Aircraft Fitted with the Handley Page Automatic Slot—General Warning.

THE attention of all pilots is drawn to the fact that the object of the Handley Page Automatic Slot is to improve the safety factor of flying by giving increased control to aircraft when brought below the flying speed, either through inadvertence on the part of the pilot, or in cases of real emergency.

Unless, therefore, all slotted aircraft are normally flown exactly as if they were not fitted with slots, the additional margin of safety given by the slots is entirely destroyed.

Consequently it is particularly emphasised that the criterion of good pilotage in normal flying should be that the slots are never in use for the purpose of giving control below stalling speed, except in the emergencies for which they were originally fitted. (No. 70 of 1928.)

NOTICE TO GROUND ENGINEERS.

"Zenith" Carburettor Type 42/F.S.L. Fitted to "Cirrus" Mk. I. Engines

At least one instance has occurred where the shroud of the main jet in a carburettor of the above-mentioned type has become detached from its housing and drawn up into the engine. With a view to the avoidance of this possibility, the following action is to be taken by ground engineers responsible for "Cirrus" Mk. I. engines:—

A hole, $\frac{1}{8}$ in. in diameter, is to be drilled through one corner of the hexagon at the base of the main jet shroud and a similar hole drilled through the bottom of the air intake port close up to the jet housing. The main jet shroud is then to be screwed tightly into position and locked by means of a wire passed through the two holes, this wire finally being fastened to the wire which is similarly used for securing the base plugs under the main and compensator jets. (No. 2 of 1928.)

PUBLICATIONS RECEIVED

Aeronautical Research Committee Reports and Memoranda: No. 1146. Full Scale and Model Measurements of Lift and Drag of a Bristol Fighter fitted with R.A.F. 34 Wings. By J. K. Hardy and A. S. Hartshorn. Nov., 1927. Price 9d. net. No. 1147. Wind Tunnel Tests of Aerofoil R.A.F. 36. By F. B. Bradfield and K. W. Clark. Dec., 1927. Price 6d. net. H.M. Stationery Office, Kingsway, London, W.C.2.
Elements of Aviation. By Col. V. Evans Clark. The Ronald Press Company, 15, East 26th Street, New York. Price 3 dols.

AERONAUTICAL PATENT SPECIFICATIONS

(Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged, etc.)

APPLIED FOR IN 1927

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9,206. C. A. VILLIERS. Propelling and controlling devices for air and water craft. (296,736.)
12,221. E. B. BOUGHTON, W. EMMOTT and D. T. BROCK. Braking-mechanism for aerial machines. (296,798.)
14,855. J. STONE & CO., LTD., and C. J. LYTH. Screw propellers. (296,717.)

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